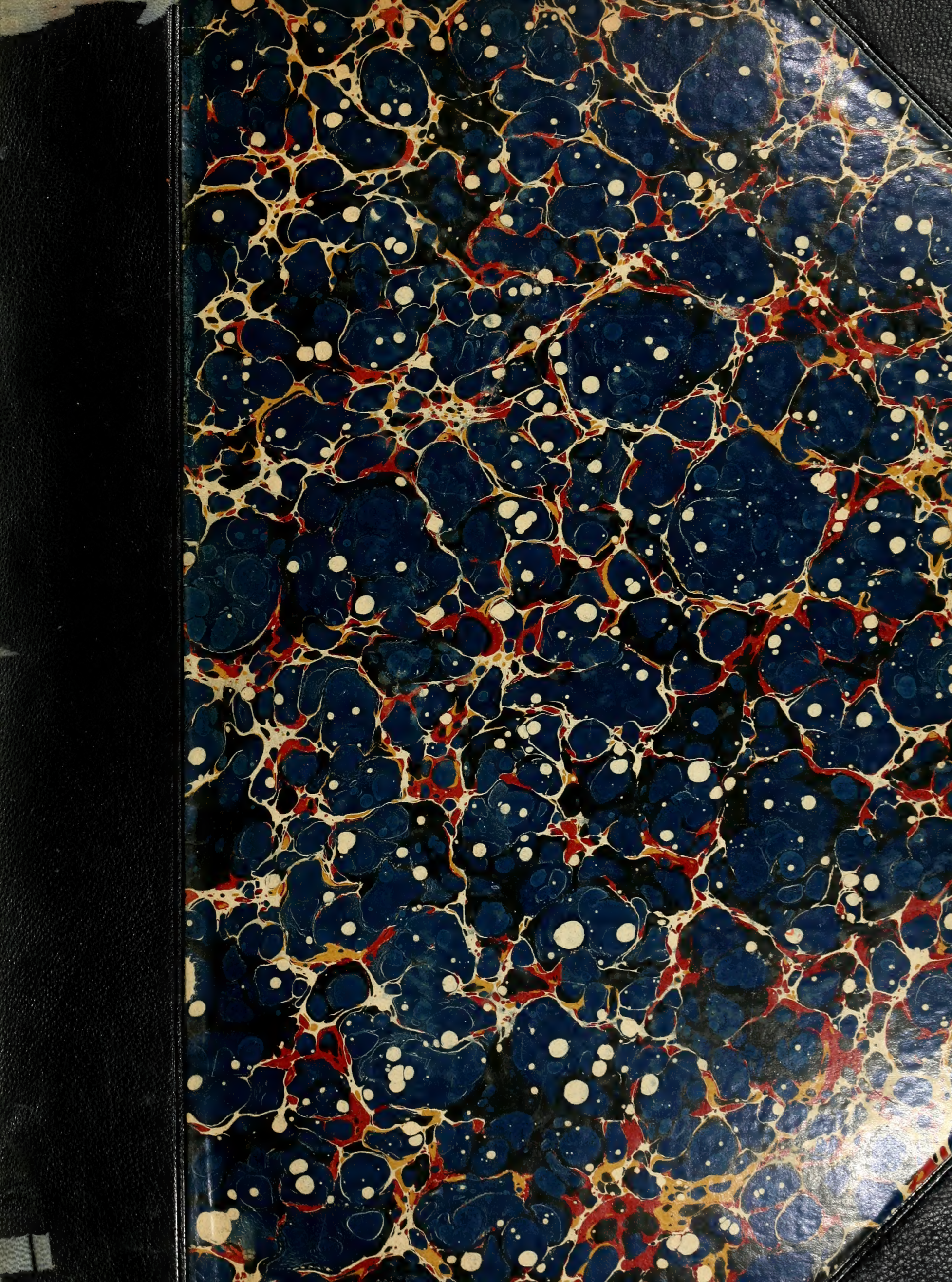

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RESULTS

OF THE

MAGNETICAL AND METEOROLOGICAL

OBSERVATIONS

MADE AT

THE ROYAL OBSERVATORY, GREENWICH,

1865.

26410

(EXTRACTED FROM THE GREENWICH OBSERVATIONS, 1865.)

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ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS.

1865.

GREENWICH MAGNETICAL AND METEOROLOGICAL OBSERVATIONS,

1865.

INTRODUCTION.

§ 1. *Buildings of the Magnetic Observatory.*

In consequence of a representation by the Astronomer Royal, and a memorial by the Board of Visitors of the Royal Observatory, addressed to the Lords Commissioners of the Admiralty, an additional space of ground on the south-east side of the former boundary of the Observatory grounds was inclosed from Greenwich Park for the site of a Magnetic Observatory, in the summer of 1837, and the Magnetic Observatory was erected in the spring of 1838. Its nearest angle in its present form is about 174 feet from the nearest point of the S.E. dome, and about 30 feet from the office of Clerk of Works. It is based on concrete and built of wood, united for the most part by pegs of bamboo; no iron was admitted in its construction, or in subsequent alterations. Its form, as originally built, was that of a cross with four equal arms, very nearly in the direction of the cardinal magnetic points as they were in 1838; the length within the walls, from the extremity of one arm of the cross to the extremity of the opposite arm, was 40 feet, the breadth of each arm 12 feet. In the spring of 1862, the northern arm was extended 8 feet. The height of the walls inside is 10 feet, and the ceiling of the room is about 2 feet higher. The northern arm of the cross is separated from the central square by a partition, so as to form an ante-room. The meridional magnet, for observations of absolute declination and of variations of declination (placed in its position in 1838), is mounted in the southern arm; and the theodolite by which the magnet collimator is viewed, and by which circumpolar stars for determination of the astronomical meridian are also observed (for which observation an opening is made in the roof, with proper shutters,) is in the southern arm, near the southern boundary of the central square. The bifilar magnet, for variations of horizontal magnetic force (erected at the end of 1840) was mounted near the northern wall of the eastern arm; and the balance-magnetometer, for variations of vertical magnetic force (erected in 1841) was mounted near the northern wall of the western arm. Important changes have lately been made in the positions of these instruments, as will be mentioned below. The sidereal time-clock is in the south arm, near the south-east re-entering angle. The fire-grate (constructed of copper, as far as possible,) is near the north end of the west side of the ante-room. Some of these fixtures may contain trifling quantities of iron, and, as the ante-room is used as a computing room it is impossible to avoid the introduction of iron in small quantities; great care, however, is taken to avoid it as far as possible.

In 1864, a room, called the Magnetic Basement, was excavated below the whole of the Magnetic Observatory except the ante-room; the descent to it is by a staircase close to the south wall of the western arm of the building. For the theodolite, a brick pier was built from the ground below the floor of the basement, rising through the ceiling into the south arm of the upper room, and supporting the theodolite in exactly the same position as before.

Instead of a single meridional magnet performing the double functions of "magnet for determining absolute magnetic declination," and "magnet carrying a mirror for photographic register," there are now two meridional magnets, one in the upper room and one in the basement. The upper magnet is in a position about 10 inches north of the former position of the declination-magnet; it carries a collimator, for observation by the theodolite; but, in reversion of position of the collimator, the collimator is always either above or below the magnet, so that the magnet is always in the same vertical. The lower magnet, which is in the same vertical with the upper magnet, carries the mirror for the photographic register of the continual changes of declination. A massive brick pier is built in the south arm of the basement, covered by a stone slab; upon it is fixed the photographic lamp; from the stone slab rise three smaller piers, upon which crossed slates are placed; and from these rises a small pier through the ceiling, to the height of 18 inches above the upper floor, carrying the suspension of the lower magnet. Upon the tops of the three piers rest the feet of the original wooden stand carrying the suspension of the upper magnet.

The bifilar-magnetometer is in the basement, in a position vertically below its former position. A massive brick pier, surmounted by a thick slab of stone (upon which the photograph lamp is fixed) carries a pier consisting of a back and return-sides, which rises through the ceiling about 2 feet above the upper floor, and is crowned by a slate slab that carries the suspension of the bifilar-magnetometer.

The vertical-force magnetometer is in the basement, in a position vertically below its former position; it rests upon a brick pier, capped by a thick stone; to which also its photographic lamp is fixed.

To the theodolite-pier are fixed telescopes for eye-observation of the bifilar and vertical-force magnetometers.

At the south-east re-entering angle (which has been rebated for the purpose) is the horizontal photographic cylinder, which receives the traces of the movements of the declination-magnet and the bifilar-magnet. The angle is so far cut away that the straight line joining their suspensions passes a foot from the wall, and thus the cylinder receives the light from both instruments at right angles to its surface. The vertical cylinder which receives the traces of the movements of the vertical-force-magnet, and, of the self-registering barometer near it, is east of the vertical force pier.

In the south-west corner of the western arm, and partially beneath the staircase, is the apparatus for self-registration of the spontaneous galvanic currents on the wires leading respectively to Croydon and to Dartford.

The mean-time-clock is on the west wall of the south arm of the basement.

Adjoining the north wall of the east arm is the table for photographic operations. As much water is used in these operations, a pump is provided in the grounds at a distance of about 30 feet from the nearest magnetometer, by which the water is withdrawn from the cistern at the east end of the photographic table and at once discharged into a covered drain.

The basement is warmed by a gas stove, and ventilated by a large copper tube nearly two feet in diameter, receiving the flues from the stove and all the lamps, and passing through the upper room to a revolving cowl above the roof. Each of the arms of the basement has a window facing the south, but in general they are closely stopped.

The variations in the temperature of the instruments have been greatly reduced by their location within this basement.

On the outside of the Magnetic Observatory, near the north-east corner of the ante-room, a pole 79 feet in height is fixed, for the support of the conducting wires to the electrometers; the electrometers, &c., are planted in the window-seat at the north-end of the ante-room.

The apparatus for naphthalizing the gas used in the photographic registration was formerly fixed in a corner of the ante-room, but is now (1865) mounted in a small detached zinc-built room, erected in 1863, near the west side of the ante-room.

A small wooden building, in the direction S.S.E. (magnetic) from the Magnetic Observatory, 64 feet from its nearest angle, and very near the southern boundary of the grounds, was used till 1863 for the observation of Magnetic Dip; and another small building, in the direction S. (magnetic) from the Magnetic Observatory, 50 feet from the western angle of the southern arm, was used till 1862 for the observation of Deflexions. In 1863, these buildings were removed, and a range of seven rooms, usually called the Magnetic Offices, was erected near the southern fence of the grounds. Since the summer of 1863, observations of Dip and Deflexion have been made in the westernmost of these rooms.

At the distance of 28 feet south (magnetic) from the south-east angle of the southern arm is a square shed about $10^{ft}\ 6^{in}$ square, supported by four posts at the height 8 feet, with an adjustable opening at the center of the top. Under this shed are placed the large dry-bulb and wet-bulb thermometers, with a photographic cylinder, axis vertical, between them; and external to these are the gas flames, whose light passing through the thermometer-tubes above the quicksilver makes photographic traces upon the paper which covers the cylinder.

For better understanding of these descriptions, the reader is referred to the Descriptions of Buildings and Grounds with accompanying Maps, attached to the Volumes of Astronomical Observations for the years 1845 and 1862.

§ 2. *Upper Declination-Magnet and Apparatus for observing it.*

The theodolite with which the meridional magnet is observed is by Simms: the radius of its horizontal circle is 8·3 inches: it is divided to 5′, and reads to 5″, by three verniers, carried by the revolving frame of the theodolite. The fixed frame stands upon three foot-screws, which rest in brass channels let into a stone pier, that stands upon the brick pier rising from the ground of the Magnetic Basement. The revolving frame carries the Y's (with vertical adjustment at one end) for a telescope with transit-axis: the length of the axis is 10½ inches: the length of the telescope 21 inches: the aperture of the object glass 2 inches. The Y's are not carried immediately by the T head which crosses the vertical axis of the revolving frame, but by pieces supported by the ends of that T head, and projecting horizontally from it: the use of this construction is to allow the telescope to be pointed sufficiently high to see δ Ursæ Minoris above the pole. The eye-piece of the telescope carries only one fixed horizontal wire, and one vertical wire moved by a micrometer-screw. The opening in the roof of the building permits the observation of circumpolar stars, as high as δ Ursæ Minoris above the pole, and as low as β Cephei below the pole.

For supporting the magnet, a braced wooden tripod-stand is provided, whose mounting has been described above. Upon the cross-bars of the stand rests a double rectangular box (one box completely inclosed within another), both boxes being covered with gilt paper on their exterior and interior sides. On the southern side of the principal upright piece of the stand is a moveable upright bar, turning in the vertical E. and W. plane, upon a pin in its centre (which is fixed in the principal upright), and carrying at its top the pulleys for suspension of the magnet; this construction is adopted as convenient for giving an E. and W. movement (now very rarely required) to the point of suspension, by giving a motion to the lower end of the bar. The top of the upright piece carries a brass frame with two pulleys, whose axes are E. and W.: one of these pulleys projects beyond the north side of the principal upright, and from it depends the suspension skein: the other pulley projects on the south side: the suspension skein being brought from the magnet up to the north pulley is carried over it and over the south pulley, to a small windlass, carried by the lower part of the moveable upright. The height of the two pulleys above the floor is about 11 ft. 3¾ in., and the height of the magnet is about 2 ft. 10 in.; the length of the metal carrier which bears the magnet is 1 ft. 3 in.; so that the length of the free suspending skein is about 7 ft. 2¾ in.

The magnet was made by Meyerstein, of Göttingen: it is a bar 2 feet long, 1½ inch broad, and about ¼ inch thick: it is of hard steel throughout. The magnet carrier was also made by Meyerstein, but it has since been altered by Simms. The magnet is inserted sideways and fixed by screws in a double square hook which constitutes the lower part of the magnet carrier. This lower part turns stiffly by a vertical axis with index in a graduated horizontal circle (usually called the torsion circle) attached to the upper part. The upper part of the magnet carrier is simply hooked into the skein.

The suspending skein was originally of silk fibre, in the state in which it is first prepared by silk manufacturers for further operations; namely, when seven or more fibres from the cocoon are united by juxtaposition only (without twist) to form a single thread. The skein was strong enough to support perhaps three times the weight of the magnet, &c.

In the summer and autumn of 1864, an attempt was made to suspend the Magnet by a steel wire, capable of supporting the weight 15 lbs.; but the torsion force was found to be so large as greatly to diminish the value of the observations; and the skein was finally restored on 1865, January 20. A similar attempt was made for suspension of the lower magnet; the skein, however, was restored on January 30.

Upon the magnet there slide two brass frames, firmly fixed in their places by means of pinching-screws. One of these contains, between two plane glasses, a cross of delicate cobwebs; the other holds a lens of 13 inches focal length and nearly 2 inches aperture. This combination, therefore, serves as a collimator without a tube: the cross of cobwebs is seen very well with the theodolite-telescope, when the suspension-bar of the magnet is so adjusted as to place the object-glass of the collimator in front of the object-glass of the theodolite, their axes coinciding. The wires are illuminated by a lamp and lens in the night, and by a reflector in the day.

In the original mounting of this magnet the small vibrations were annihilated by a copper oval or "damper," thus constructed: A copper bar, about one inch square, is bent into a long oval form, intended to contain within itself the magnet (the plane of the oval curve being vertical). A lateral bend is made in the upper half of the oval, to avoid interference with the suspension-piece of the magnet. The effect of this damper is that, after every complete or double vibration of the magnet, the amplitude of the oscillation is reduced in the proportion of 5 : 2 nearly.

On mounting the photographic magnetometer in the basement, the damper was carried down to encircle it; and the upper magnet remained unchecked in its vibrations till 1866, January 23, when the lower part of the magnet-carrier was connected with a brass bar which vibrates in water.

OBSERVATIONS RELATING TO THE PERMANENT ADJUSTMENTS OF THE UPPER DECLINATION-MAGNET AND ITS THEODOLITE.

1. Determination of the inequality of the pivots of the theodolite-telescope.

1862, December 26. The theodolite was clamped, so that the transit axis was at right angles to the astronomical meridian. The illuminated end of the axis of the telescope was first placed to the East: the level was applied, and its scale was read; the level was then reversed, and its scale was again read; it was then again reversed, and again read, and so on successively six times. The illuminated end of the telescope was then placed to the West, and the level was applied and read as before. This process was repeated four times, and the result was that when the level indicates the axis to be horizontal, the axis at the illuminated end is really too low by $0''\cdot3$ nearly.

2. Value of one revolution of the micrometer-screw of the theodolite telescope.

1862, December 26. The magnet was made to rest on blocks of wood, and its collimator was used as a fixed mark at an infinite distance. The micrometer was placed in different positions, and the telescope of the theodolite was then turned till the micrometer wire bisected the cross. The result of ten comparisons of theodolite-readings with large values and small values of the micrometer-reading was, that one revolution = 1′. 33″·85. This agrees with the result of observations made in preceding years.

3. Determination of the micrometer-reading for the line of collimation of the theodolite-telescope.

1864, December 9. The vertical axis of the theodolite had been adjusted to verticality, and the transit axis was made horizontal. The declination-magnet was made to rest on blocks, and the cross-wires carried by it were used as a collimator for determining the line of collimation of the telescope of the theodolite. The telescope was reversed after each observation. The mean of 20 double observations was $100^{r}\cdot110$. This value was used to 1865, April 27, when the observations were repeated, giving the value $100^{r}\cdot087$, which is used to the end of the year.

4. Determination of the effect of the mean-time-clock on the declination-magnet.

The observations by which this has been determined are detailed in the volumes for 1840, 1841, 1844, and 1845. It appeared that it was necessary to add 9″·41 to every reading of the theodolite. The clock was removed to the basement in 1864, having now nearly the same relative position to the lower declination-magnet which formerly t had to the upper. No correction is now applied to the upper declination-magnet.

5. Determination of the compound effects of the vertical-force-magnet and the horizontal-force-magnet on the declination-magnet.

The details applying to the effect of the horizontal-force-magnet and first vertical-force-magnet will be found in the volumes for 1840, 1841, 1844, and 1845. It appeared that it was necessary to subtract 55″·22 from all readings of the theodolite. In 1848 a new vertical-force-magnet was introduced, and the subtractive quantity was then found to be 42″·2. A few experiments in 1865 seemed to show that the correction is now 36″·9. No numerical correction has been applied.

6. Determination of the error of collimation for the plane glass in front of the boxes of the declination-magnet.

1865, December 27. The magnet was made to rest entirely on blocks. The micrometer head of the telescope was to the East. The plane glass has the word "top" engraved on it, and, in ordinary use, this word is always kept east. The cross-wire carried by the collimator of the magnet was observed with the engraved word alternately east and west. The result of 20 double observations was, that in the ordinary position of the glass 18″·5 is to be added to all readings.

7. Determination of the error of collimation of the magnet-collimator, with reference to the magnetic axis of the magnet.

1865, February 17. Observations were made by placing the declination-magnet in its stirrup, with its collimator alternately above and below, and observing the collimator-wire by the theodolite-telescope; the windlass of the suspending skein being so moved that the collimator in each observation was in the line of the theodolite-telescope. Sixteen pairs of observations were taken. The mean half excess of reading with collimator above, (its usual position) above that with collimator below was 25′. 29″· 1. A repetition of the observations on April 27 gave 26′. 7″· 41. This value is used in the reductions.

8. Effect of the damper.

In the volume for 1841 observations are exhibited shewing that the oval copper bar, or damper, which then surrounded what is now the upper declination-magnet, had but little or no effect. Repeated observations, of less formal character, in succeeding years, have confirmed this result. The same bar has encircled the lower declination-magnet throughout the year 1865. The following observations were made in the year 1865, for ascertaining the effect of the damper on the lower declination-magnet under various circumstances.

On 1865, February 8 and 10, and March 2, the time of vibration of the magnet was observed:—

Mean of times with damper in usual position	$23^{s}\cdot888$
Mean of times with damper reversed end for end	$24^{s}\cdot508$
Mean of times when damper was removed	$23^{s}\cdot153$

These seem to indicate a repulsion of the magnet by the damper, but the magnet came to rest so rapidly that the observations are very uncertain.

On several days from April 2 to May 12, observations were made for ascertaining the deflexion of the magnet produced by turning the damper through a small angle round a vertical axis, passing through its center.

DAMPER IN USUAL POSITION.

			′ ″
Damper turned through 2°	N. end towards E.,	increase of western declination	−1. 27
	N. end towards W.,	„ „ „	+1. 25
Damper turned through 4°	N. end towards E.,	„ „ „	−2. 16
	N. end towards W.,	„ „ „	+3. 11
Damper turned through 6°	N. end towards E.,	„ „ „	−3. 10
	N. end towards W.,	„ „ „	+2. 55
Damper turned through 8°	N. end towards E.,	„ „ „	−1. 22
	N. end towards W.,	„ „ „	+1. 45

DAMPER REVERSED END FOR END.

Damper turned through 2	N. end towards E.,	increase of western declination	+0. 12
	N. end towards W.,	„ „ „	+0. 20
Damper turned through 4°	N. end towards E.,	„ „ „	0. 0
	N. end towards W.,	„ „ „	+0. 26
Damper turned through 6°	N. end towards E.,	„ „ „	+0. 5
	N. end towards W.,	„ „ „	+0. 5
Damper turned through 8°	N. end towards E.,	„ „ „	−0. 10
	N. end towards W.,	„ „ „	+0. 5

The first series shews clearly that the damper in its usual position drags the magnet; the second shews no certain effect. It seems that the damper possesses two kinds of magnetism, one permanent, the other transiently induced, of nearly equal magnitude; their sum being about $\frac{1}{100}$ part of the terrestrial effect for the same deflexion.

From July 25 to August 9, observations were made to ascertain whether the effect of an external deflecting cause is the same with the damper present and the damper removed. The observation was extremely difficult, as the magnet was perpetually in vibration when the damper was removed. A small magnet on the east side of the N. end of the magnetometer, with its north end pointing towards the East (and therefore diminishing the western declination of the magnetometer), was moved to the distance (about five feet) at which it produced a deviation of 5′ nearly. The apparent western declination was observed, damper present, and damper removed. It appeared to be less with damper present than with damper removed, by 0′. 53″. The separate results are very discordant. If the conclusion has any validity, it tends to shew a repulsive power in the damper, opposite to that found in the preceding experiments. This experiment is regarded as inconclusive.

9. Calculation of the constant used in the reduction of the observations of the upper declination-magnet, the micrometer-head of the theodolite telescope being East.

	°	′	″
Micrometer equivalent for reading for line of collimation, 100r·087	−2.	36.	33·2
Correction for the plane glass in front of the box, in its usual position......	+		18·5
The collimator above the magnet. Correction for error of collimation....	−	26.	7·4
Constant to be used in the reduction of the observations......	−3.	2.	22·1

By inadvertence, the number −3°. 2′. 41·″9 has been used in the reductions.

10. Determination of the time of vibration of the upper declination-magnet under the action of terrestrial magnetism.

It is known, from constant observation, that the time of a single vibration is as nearly as possible 30s; but no observations are recorded which merit distinct reference.

11. Fraction expressing the proportion of the torsion-force to the earth's magnetic force.

By the same process which is described in the Magnetical Observations 1847, the proportion with the steel wire in use from 1864, June, to 1865, January 17, was found on January 17 to be $\frac{1}{8}$; and on January 18, with a new wire, $\frac{2}{21}$. With a silk skein, the proportion was found, on 1865, January 31, $\frac{1}{214}$; on February 17, $\frac{1}{227}$; on April 27, $\frac{1}{207}$; and on December 27, $\frac{1}{230}$.

DETERMINATION OF THE READINGS OF THE HORIZONTAL CIRCLE OF THE THEODOLITE CORRESPONDING TO THE ASTRONOMICAL MERIDIAN.

The error of the level is determined by application of the spirit-level at the time of observation: due regard being paid, in the reduction, to the inequality of pivots already found. One division of the level is considered = 1″·0526. The azimuth-reading is then corrected by this quantity;

Correction = Elevation of W. end of axis × tan star's altitude.

The readings of the azimuth circle increase as the instrument is turned from N. to E., S., and W.; from which it follows that the correction must have the same sign as the elevation of the W. end.

The correction for the azimuth of the star observed has been computed independently in every observation, by a peculiar method, of which the principle is fully explained in the volumes for 1840, 1841, 1843, 1844, 1845. The formula and table used are the following:—

Let $A_{''}$ = seconds of arc in star's azimuth,
C_s = seconds of time in star's hour-angle,
$a_{''}$ = seconds of arc in star's N.P.D. for the day of observation,
Then $\log. A_{''} = \log. C_s + \log. E + \log. (a_{''} + F) + \log. \cos \varphi$.

The values of log. E, F, and log. cos φ, are given in the following table:—

TABULATED VALUES of LOG. COS ϕ, for DIFFERENT VALUES of C_s, and of the QUANTITIES LOG. E and F for the STARS POLARIS and δ URSÆ MINORIS.

Hour Angle.	Log. Cos φ for			
	Polaris.	δ Ursæ Minoris.	Polaris S.P.	δ Ursæ Min. S.P
m				
1	9·99999	9·99999	9·99999	9·99999
2	999	999	999	999
3	999	999	999	999
4	998	998	998	998
5	996	996	997	997
6	994	994	996	996
7	992	992	994	995
8	990	989	992	993
9	988	986	990	991
10	985	983	988	989
11	981	979	985	987
12	978	975	982	984
13	974	971	979	981
14	970	966	975	978
15	966	961	972	975
16	961	955	968	971
17	956	950	964	968
18	951	944	959	964
19	945	937	955	960
20	939	930	950	956
21	932	923	945	951
22	926	915	939	946
23	919	908	933	941
24	912	900	928	936
25	904	891	922	930
26	895	882	915	925
27	888	873	909	919
28	880	863	902	912
29	871	853	894	906
30	9·99862	9·99843	9·99887	9·99900
Log. E	6·04721	6·13638	−6·03809	−6·06617
F	−186″·79	−944″·71	+181″·57	+886″·86

Observations for determining the readings for the astronomical meridian were made on the following days in 1865:—January 4, February 9, 17, 20, March 16, 22, April 8, 21, May 5, 22, July 2, 19, August 11, 26, September 2, October 5, November 5, 10, 24, December 14, 30. As a check on the continued steadiness of the theodolite, observations of a fixed mark (a small hole in a plate of metal above the Observatory Library, illuminated by a reflector of sky-light in the day and by a lamp at night,) have been taken about thirty times at nearly equal intervals through the year.

The following is a description of the method of making and reducing the eye-observations of the declination-magnet:—

A fine horizontal wire (as stated above) is fixed in the field of view of the theodolite-telescope, and another fine vertical wire is fixed to a wire-plate, moved right and left by a micrometer screw. On looking into the telescope, the cross of the magnetometer is seen; and during the vibration of the magnet, this cross is seen to pass alternately right and left. The observation is made by turning the micrometer till its wire bisects the image of the magnet-cross at the pre-arranged times, and reading the micrometer. The verniers of the horizontal circle are read.

The mean-time clock is kept very nearly to Greenwich mean time (its error being ascertained each day), and the clock-time for each determination is arranged beforehand.

If the magnet is in a state of disturbance, the first observation is made by the observer applying his eye to the telescope about one minute before the pre-arranged time; he bisects the magnet-cross by the micrometer wire at 45^s, and again at 15^s before that time, also at 15^s and 45^s after that time. The intervals of these four observations are therefore the same as the time of vibration of the magnet, and the mean of all the times is the same as the Greenwich pre-arranged mean time.

The mean of each pair of adjacent readings of the micrometer is taken (giving three means), and the mean of these three is adopted as the result. In practice, this is done by adding the first and fourth readings to the double of the second and third, and dividing the sum by 6.

Through the year 1865, in which the upper magnet was unprovided with a damper, the magnet was usually in a state of vibration; but since the introduction of the water damper, on 1866, January 23, the number of instances of vibration has been very small. When it is found to be quite free from vibration, two bisections only of the cross are made, one about 15^s before the time recorded, the other about 15^s after that time, 30^s being nearly the time of a single vibration. (The lower magnet, furnished with the copper damper, never exhibits any troublesome vibrations.)

The adopted result is converted into arc, supposing $1^r = 1'.\ 33''\cdot85$, and the quantity thus deduced is added to the mean of the vernier-readings, from which is subtracted the constant given in article 9 of the permanent adjustments; the difference between this number and the adopted reading for the Astronomical South Meridian is taken;

and thus is deduced the magnetic declination, which is used in determining the zero for the photographic register.

§ 3. *Lower Declination-Magnet; and Photographic self-registering Apparatus for Continuous Record of Magnetic Declination.*

The lower declination magnet is made by Simms. It is 2 feet long, $1\frac{1}{2}$ inch broad, $\frac{1}{4}$ inch thick, of hard steel throughout, much harder than the upper declination magnet.

The magnet-frame consists of an upper piece, whose top is a hook, (to be hooked into the suspension-skein), and which carries a concave mirror 5 inches in diameter, used for the photographic record in the manner to be hereafter mentioned. The lower part of this upper piece turns in a graduated horizontal circle, similar to the torsion circle of the upper magnet, and attached to the lower piece or magnet-carrier proper. The lowest part of the carrier is a double square hook, in which the magnet is inserted and is kept in position by the pressure of three screws.

It has been mentioned in § 1 that a small pier built upon one of the crossed slates which are laid upon three piers rising from below, carries the suspension-pullies. The suspension-skein rises to one of these pullies, passes horizontally over a second pulley about 5 inches south of it, and then descends obliquely to a windlass which is fixed to the stone slab about 2 ft. 3 in. south of the center of the magnet.

The height of the pulley above the floor of the Basement is 10 ft. $4\frac{3}{4}$ in. As the height of the magnet above the floor is 2 ft. $10\frac{1}{2}$ in., and the length of the magnet frame is 1ft. 3 in., there remains 6 ft. $3\frac{1}{4}$ in. of free suspending skein.

The general principle adopted for all the photographic instruments is the same. The photographic paper is wrapped round a glass cylinder, and the axis of the cylinder is made parallel to the direction of the movement which is to be registered. The cylinder is turned by clock-work, with uniform velocity. The spot of light (for the magnets, the earth currents, and the barometer) or the boundary of the line of light (for the thermometers) moves, with the movements which are to be registered, in the direction of the axis of the cylinder, while the cylinder itself is turned round. Consequently, when the paper is unwrapped from its cylindrical form, there is traced upon it (though not visible till the proper chemical agents have been applied) a curve, of which the abscissa measured in the direction of a line surrounding the cylinder is proportional to the time, while the ordinate measured in the direction parallel to the axis of the cylinder is proportional to the movement which is the subject of measure.

In the instruments for registering the motions of the magnets and barometer, a line of abscissæ is actually traced on the paper, by a lamp giving a spot of light in an invariable position, the effect of which on the revolving paper is to trace a line surrounding the cylinder. For the thermometers this is not necessary, as the thermometer-scales are made to carry and to transfer to the photographic paper sufficient indications of the actual reading of the thermometers.

Every part of the cylinder-apparatus except those on which the spots of light fall is covered with a double case of blackened zinc, having a slit for each moveable spot of light and a hole for the invariable spot; and every part of the path of the photographic light is protected by blackened zinc tubes from the admixture of extraneous light.

In all the instruments, the following method is used for attaching, to the sheet of photographic paper, indications of the time when certain parts of the photographic trace were actually made, and for giving the means of laying down a time-scale applicable to every part of the trace. By means of a small moveable plate, arranged expressly for this purpose, the light which makes the trace can at any moment be completely cut off. An assistant, therefore, occasionally cuts off the light (registering in the proper book the clock-time of doing so), and after a few minutes withdraws the plate (again registering the time). The effect of this is to make a visible interruption in the trace, corresponding to registered times. By drawing lines from these points of interruption parallel to the axis of the cylinder, to meet the photographic line of abscissæ, or an adopted line of abscissæ parallel to it, points are defined upon the line of abscissæ corresponding to registered times. The whole length of the photographic sheet (except where one end, in the cylindrical arrangement, laps over the other) corresponds to the known time of revolution of the cylinder. A scale being prepared beforehand, whose value for the time of revolution corresponds to the circumference of the cylinder, and the scale-reading for the registered time of interruption of light being applied to the foot of the ordinate corresponding to that interruption, the divisions of hours and minutes may be transferred at once from the scale to the line of abscissæ. In practice it is found that the length of the paper is not always the same, and it is necessary, therefore, to use a scale (a separate one for each separate instrument) which will admit of small expansion and contraction, preserving the proportion of its different parts unaltered. A scale of vulcanized caoutchouc, mounted on a small frame in which one end of the scale is fixed while the other is drawn by a screw, is found to answer extremely well.

One of the revolving cylinders is used for the photographic record of the Declination Magnet and the Horizontal Force Magnet. In the preparation of the basement in 1864, as has been stated, the south-eastern re-entering angle was cut away, so that the straight line from the suspending skein of the declination-magnet to the center of the bifilar magnet passes through a clear space, in which the registering apparatus is placed. The first thing to be described is the arrangement of glass cylinders. One glass cylinder with a hemispherical extremity (in all respects similar to those used as shades or protectors of small clocks, works of art, &c.), 11½ inches long in its cylindrical part, and 14½ inches in circumference, is covered internally with a black pigment, and is stopped at the open end by insertion in a metallic cap, in the center of which is a short spindle and winch-arm. Round this cylinder the photographic paper is wrapped, and the moisture on the photographic paper agglutinates its overlapping ends with sufficient firmness. The cylinder and mounted paper are then covered by another glass cylinder with hemispherical end, whose open end is fixed, by friction, on the rim of the metallic cap to which the inner cylinder is attached, a collar of tape being inserted between. In this state the cylinders are placed in their working-mounting; the short spindle in the cap, and the large cylinder near its hemispherical end, rest upon friction-rollers, the axis of the cylinder being horizontal. The winch-arm is lodged in a fork at the end of the hour-hand of a timepiece, which is made for the purpose, not exceeding in size an ordinary box-chronometer, but with very strong wheels and powerful spring, and with duplex escapement. In order to avoid the ordinary shake of the hour-hand of a clock, due to the play of the motion-wheels under the dial, the hour-hand is placed upon the central axis, and the second wheel, which is usually placed in the center and carries the minute hand, is placed on one side. The cylinder was originally made to turn in twelve hours; but, as this construction sometimes required a change of the photographic sheet every twelve hours, the wheels of the time-piece were changed, to make the cylinder turn in twenty-four hours.

The light, by which the trace of the declination-magnet is made, originates in a lamp (formerly of camphine, but, since 1849, of coal-gas charged with the vapour of coal-naphtha) placed slightly out of the direction of a straight line drawn from the suspension-skein of the magnet to the center of the photographic sheet. Before the flame of the lamp is placed a small aperture, about $0^{\text{in.}}\cdot 3$ high and $0^{\text{in.}}\cdot 01$ broad, independent of the lamp, and supported by a part of the stone capping of the brick pier which carries the magnet. The light from the aperture falls upon a concave mirror of speculum-metal, 5 inches in diameter, and about 25·3 inches from the aperture. This concave mirror is above the top of the magnet box; it is carried by a part of the magnet-carrier, which, although it has a small movement of adjustment relative to the magnet-carrier, is in practice very firmly clamped to it, so that the mirror receives all the angular movements of the magnet. By the concave mirror, the light diverging from the aperture is made to converge to a place nearly on the surface of the cylinder of photographic paper whose distance from the mirror is about $11^{\text{ft.}}\ 0^{\text{in.}}\cdot 1$. The form of the aperture, however, and the astigmatism caused by the inclined reflexion from the mirror, produce this effect, that the image is somewhat elongated in the vertical direction, and is at the same time slightly curved. To diminish the length there is placed near the cylinder a plano-convex cylindrical lens of glass, with its axis horizontal, and the image is thus reduced to a neat spot of light.

The spot of light from the concave mirror of the declination-magnet is received on the south side of the cylinder, near its west end.

Near the east end of the cylinder is placed a gas lamp, shining by reflexion through a small fixed aperture above the cylinder, from which the light falls upon a small cylindrical lens, by which a very delicate and well-defined photographic trace is marked upon the paper, in a fixed position, intermediate between the photographic curves of the declination and horizontal force magnets. This is the photographic base-line, or line of abscissæ, to which allusion has been made above.

For the declination-magnet, the values, in minutes and seconds of arc, of movements of the photographic spot in the direction of the ordinate, are thus deduced from a geometrical calculation founded on the measures of different parts of the apparatus.

The distance of the cylinder from the concave mirror is about $11^{\text{ft.}}\ 0^{\text{in.}}\cdot 1$, and a movement of 1° of the mirror produces a movement of 2° in the reflected ray. From this it is found that 1° of movement of the mirror is represented by 4·611 inches upon the photographic paper. A small scale of pasteboard is prepared, whose graduations correspond in value to minutes and seconds so calculated. The zero of the ordinate-scale is found in the following manner. The time-scale having been laid down as is already described, and actual observations of the position of the magnet having been made with the eye and the telescope, (as has been fully described above), at certain registered times, there is no difficulty (by means of these registered times) in defining the points of the photographic trace which correspond to the observed positions. The pasteboard scale being applied as an ordinate to one of these points, and being slid up and down till the scale reading which represents the reading actually taken by the eye-observation falls on that point, the reading of the scale where it crosses the line of abscissæ is immediately found. The various readings given by different observations, so long as there is no instrumental change, will scarcely differ, and may be combined in groups, and thus an adopted reading for the line of abscissæ may be obtained. From this, with the assistance of the same pasteboard scale, there will be laid down without difficulty a new line, parallel to that line of abscissæ, whose ordinate would represent some whole number of degrees, or other convenient quantity.

§ 4. *Horizontal-Force-Magnet and Apparatus for observing it.*

The horizontal-force-magnet, furnished by Meyerstein of Göttingen, is, like the declination-magnet, 2 feet long, 1½ inch broad, and about ¼ inch thick. For its support (as is mentioned above), a brick pier in the eastern arm of the Magnetic Observatory, built on the ground below the basement floor, rises through the floor of the upper room, and carries a slate slab, to the top of which a brass frame is attached, carrying two brass pulleys (with their axes in the same east and west line) in front of the pier, and two (in a similar position) at the back of the pier; these constitute the upper suspension-piece. A small windlass is attached to the back of the pier at a convenient height. The magnet-carrier consists of two parts; the upper part is a vertical plate, having a pair of small pulleys attached to it, (whose axes are perpendicular to the plate); carrying, below those two pulleys, the photographic concave mirror; and connected below with the torsion-circle; the lower part is the magnet-stirrup, turning by stiff friction in the torsion-circle, and bearing a pointer above for reading its graduations, and bearing also a small plane mirror below, to which a fixed telescope is directed for observing by reflexion the graduations of a fixed scale (to be mentioned shortly). Under the two small pulleys of the vertical plate passes a skein of silk; its two branches rise up and pass over the front pulleys of the suspension-piece, then over its back pulleys, and then descend and pass under a single large pulley, whose axis is attached to a string that passes down to the windlass. (A steel wire, capable of supporting about 7½ lbs., was used instead of the skein in the latter half of the year 1864; but its torsion-force was found to be so great that it was dismounted, and the skein restored as formerly, on 1865 February 3.) Supported by the two branches of the skein, the magnet swings freely, but the direction that it takes will depend on the angular position of its stirrup with respect to the vertical plate; it is intended that the index should be brought to such a position on the torsion-circle that the two suspending branches should not hang in one plane, but should be so twisted that their torsion-force will maintain the magnet in a direction very nearly E. and W. magnetic (its marked end being W.); in which state an increase of the earth's magnetic force draws the marked end towards the N., till the torsion-force is sufficiently increased to resist it; or a diminution allows the torsion-force to draw it towards the S. The vertical plane is continued downwards, carrying, above the magnet box, the concave mirror four inches in diameter, by which the light diverging from a small hole in front of a gaslamp, at the distance $21^{\text{in}}\cdot25$, is made to converge nearly on the surface of the photographic cylinder, at the distance $11^{\text{ft.}}\,2^{\text{in.}}\,4$. The spot of light is received on the north side of the cylinder, near its east end. Below the concave mirror is the torsion-circle, at which the magnet-carrier is attached, with power of rotation, to the vertical plane. The magnet, with its plane mirror, hangs within a double rectangular box (one box completely inclosed within another) covered with gilt paper, similar to that used for the declination-magnet; in its S. side there is one long hole, covered with glass, through which the rays of light from the scale enter to fall on the plane mirror, and the rays reflected by the mirror pass to the fixed telescope. The vertical rod (below the pointer for indications of torsion-circle), which carries the magnet-stirrup, passes through a hole in the top of the box. The height of the brass pulleys of the suspension-piece above the floor is $11^{\text{ft.}}\,8^{\text{in.}}\,5$; that of the pulleys of the magnet-carrier is $4^{\text{ft.}}\,2^{\text{in.}}\,5$; and that of the center of the plane mirror is about $3^{\text{ft.}}\,1^{\text{in.}}$. The distance between the branches of the silk skein, where they pass over the upper pulleys, is $1^{\text{in.}}\cdot14$; at the lower part the distance between them is $0^{\text{in.}}\cdot80$.

An oval copper bar (exactly similar to that for the declination-magnet), embraces the magnet for the purpose of diminishing its vibrations.

The scale, which is observed by means of the plane mirror, is in a horizontal position, and is fixed to the South wall of the East arm of the magnetic basement. The numbers of the scale increase from East to West, so that when the magnet is inserted in the magnet-cell with its marked end towards the West, increasing readings of the scale (as seen with a fixed telescope directed to the mirror which the magnet carries) denote an increasing horizontal force. A normal from the plane-mirror to the scale meets it at the division 51 nearly; the distance from the center of the plane-mirror to the scale is $7^{\text{ft.}}\,6^{\text{in.}}\cdot8$.

The telescope is fixed on the east side of the brick pier which supports the stone pier of the declination-theodolite in the upper observing room. The angle between the normal to the scale (which usually coincides nearly with the normal to the axis of the magnet) and the axis of the telescope, is about 38°, and the plane of the mirror is therefore inclined to the axis of the magnet about 19°.

OBSERVATIONS RELATING TO THE PERMANENT ADJUSTMENTS OF THE HORIZONTAL-FORCE-MAGNET.

1. Determination of the times of vibration and of the different readings of the scale for different readings of the torsion-circle, and of the reading of the torsion-circle and the time of vibration when the magnet is transverse to the magnetic meridian.

To render the process intelligible, it may be convenient to premise the following explanation.

Suppose that the magnet is suspended in its stirrup which is firmly connected with the small plane mirror, with its marked end in a magnetic westerly direction (not exactly W., but in any westerly direction between N. and S.), and suppose that, by means of the telescope directed towards that mirror, the scale is read, or (which is the same thing) the position of the plane mirror and of the stirrup, and therefore that of the axis of the magnet, are defined. Now let the magnet be taken out of the stirrup and replaced with its marked end easterly. The terrestrial magnetic power will now act, as regards torsion, in the direction opposite to that in which it acted before, and therefore the magnet will not take the same position as before. But by turning the torsion-circle, which changes the amount and direction of the torsion-power produced by the oblique tension of the suspending cords, the magnet may be made to take the same position as before (which will be proved by the reading of the scale, as viewed in the plane mirror, being the same as before). The reading of the torsion-circle will be different from what it was before. The effect of this operation then is, to give us the difference of torsion-circle-readings for the same position of the magnet-axis with the marked end opposite ways, but it gives no information as to whether the magnet-axis is transverse to the meridian, inasmuch as the same operation can be performed whether the magnet-axis is transverse or not.

But there is another observation which will inform us whether the magnet-axis is or is not transverse. Let the time of vibration be taken in each position of the magnet. Resolve the terrestrial magnetic force acting on the poles of the magnet into two parts, one transverse to the magnet, the other longitudinal. In the two positions of the magnet (marked end westerly and marked end easterly, with axis in the same position), the magnitude of the transversal force is the same, and the changes which the torsion undergoes in a vibration of given extent are the same, and the time of vibration (if there were no other force) would be the same. But there is another force, namely the longitudinal force; and when the marked end is northerly, this tends from the center of the magnet's length, and when it is southerly it tends towards the center of the magnet's length; and in a vibration of given extent this produces force, in one case increasing that from the torsion and in the other case diminishing it. The times of vibration therefore will be different. There is only one exception to this, which is when the magnet-axis is transverse to the magnetic meridian, in which case the longitudinal force vanishes.

The criterion then of the position truly transverse to the meridian (which position is necessary in order that the indications of our instrument may apply truly to changes of the magnitude of terrestrial magnetic force without regard to changes of direction) is this. Find the readings of the torsion-circle which, with magnet in reversed positions, will give the same readings of the scale as viewed by reflexion in the plane mirror, and will also give the same time of vibration for the magnet. With these readings of the torsion-circle the magnet is transverse to the meridian; and the difference of the readings of the torsion-circle is the difference, between the position when terrestrial magnetism acting on the magnet twists it one way, and the position when the same force twists it the opposite way, and is therefore double the angle due to the torsion-force of the suspending lines when they neutralize the force of terrestrial magnetism.

The following table exhibits the elements of one of the determinations made in 1865:—

1865.	The Marked end of the Magnet.							
Day.	West.				East.			
	Torsion-Circle Reading.	Scale Reading.	Difference of Scale Readings for 1° of Torsion.	Mean of the Times of Vibration.	Torsion-Circle Reading.	Scale Reading.	Difference of Scale Readings for 1° of Torsion.	Mean of the Times of Vibration.
	°	div.	div.	s	°	div.	div.	s
February 7	141	17·00	9·02	21·42	223	20·51	7·58	20·00
	142	26·02	8·70	21·32	224	28·09	7·82	20·20
	143	34·72	8·53	20·96	225	35·91	7·55	20·36
	144	43·25	8·84	20·80	226	43·46	8·40	20·52
	145	52·09	8·06	20·68	227	51·86	8·07	20·66
	146	60·15	8·58	20·54	228	59·93	8·46	20·80
	147	68·73	7·39	20·42	229	68·39	8·27	20·86
	148	76·12	7·98	20·30	230	76·66	8·60	20·96
	149	84·10		20·14	231	85·26		21·18

The times of vibration and scale readings were sensibly the same, when the torsion-circle read 145°., marked end West, and 227°. 2′, marked end East, differing 82°. 2′. Half this difference, or 41°. 1′, is the angle of torsion when the magnet is transverse to the meridian.

The mean of several determinations gave 40°. 58′., and this value was adopted for the year 1865. The reading adopted for the torsion-circle, marked end of the magnet West, was 145° for the year.

2. Computation of the angle corresponding to one division of the scale, and of the variation of the horizontal force (in terms of the whole horizontal force) which moves the magnet through a space corresponding to one division of the scale.

It was found by accurate measurements, on 1864, November 3, that the distance from $51^{\text{div.}}$ on the scale to the center of the face of the plane mirror is $7^{\text{ft.}}\ 6^{\text{in.}}\cdot 84$, and that the length of $30^{\text{div.}}\cdot 85$ of the scale is exactly 12 inches; consequently the angle at the mirror subtended by one division of the scale is 14′. 43″·25, or, for one division of the scale, the magnet is turned through an arc of 7′. 21″·625.

The adopted angle of torsion as mentioned above is 40°. 58′; consequently the variation of horizontal force (in terms of the whole horizontal force) for a disturbance through one division of the scale, computed by the formula, "Cotan. angle of torsion × value of one division in terms of radius," is 0·002466. This number has been used in the year 1865, from February to the end of the year.

3. Determination of the compound effect of the vertical-force-magnet and the declination-magnet on the horizontal-force-magnet, when suspended with its marked end towards the West.

The details of the experiments, made while the old vertical-force-magnet was in use, will be found in the volumes for 1841, 1842, 1843, 1844, 1845. The effect was to increase the readings by $0^{\text{div}}\cdot487$. On mounting a new vertical-force-magnet in 1848, similar experiments were made, and the resulting number was $0^{\text{div}}\cdot45$. These quantities are totally unimportant in their influence on the registers of changes of horizontal force. No experiments have been made since the magnets were placed in the basement.

4. Effect of the damper.

From May 17 to May 25, observations were made for ascertaining the deflection of the magnet produced by turning the damper through a small angle round a vertical axis passing through its center.

DAMPER IN USUAL POSITION.

			div.
Damper turned through 2°	W. end towards S., increase of scale-reading	....	−0·251
	W. end towards N., ,, ,,	....	+0·050
Damper turned through 4°	W. end towards S., ,, ,,	....	−0·34
	W. end towards N., ,, ,,	....	+0·16

DAMPER REVERSED END FOR END.

Damper turned through 2°	W. end towards S., increase of scale-reading	....	−0·15
	W. end towards N., ,, ,,	....	−0·02
Damper turned through 4°	W. end towards S., ,, ,,	....	−0·12
	W. end towards N., ,, ,,	....	+0·08

On July 25, observations were made to ascertain whether the effect of an external deflecting cause is the same with the damper present and the damper removed. A small magnet was placed with its marked end pointing N. at the distance 4 feet S. of the unmarked end of the horizontal-force-magnet, deflecting the magnet through $1^{\text{div.}}$ of the scale, and the scale-readings were observed with the damper in its usual place and the damper away. Three experiments were made, containing twenty-four observations of position. Not the smallest difference of position of the horizontal-force-magnet was produced by the presence or absence of the damper. The observations were very easy, and the result is certain.

5. Determination of the correction for the effect of temperature on the horizontal force magnet.

In the Introduction to the volume of Magnetical and Meteorological Observations for 1847 will be found a detailed account of observations made in the years 1846 and 1847 for determination of this element. The principle adopted was that of observing the deflection which the magnet (to be tried) produces on another magnet; the magnet (to be tried) being carried by the same frame which carries the telescope that is directed to the plane mirror attached to the other magnet, and which also carries the scale that is viewed in these experiments by reflection in that plane mirror. The rotation of the frame was measured by a graduated circle about 23 inches in diameter. The magnet (to be tried) was always on the eastern side of the other magnet. It was enclosed in a copper trough, which was filled with water at different temperatures. One end of the magnet (to be tried) was directed towards the other magnet. The values found for correction of the results as to horizontal force determined with the magnet at temperature t° in order to reduce them to what they would have been if the temperature of the magnet had been 32°, expressed as multiples of the whole horizontal force, were,*

When the marked end of the magnet (to be tried) was West,

$$0{\cdot}00007137\ (t-32) + 0{\cdot}000000898\ (t-32)^2.$$

When the marked end of the magnet (to be tried) was East,

$$0{\cdot}00009050\ (t-32) + 0{\cdot}000000626\ (t-32)^2.$$

The mean, or

$$0{\cdot}00008093\ (t-32) + 0{\cdot}000000762\ (t-32)^2$$

has been embodied in tables which have been used in the computation of the "Reduction of Magnetic Observations 1848–1857," attached to the Volume of Observations 1859, and in the computation for "Days of Great Magnetic Disturbance 1841–1857," attached to the volume for 1862. The same formula is employed in the Reduction of Magnetic Observations 1858–1863, now in progress.

In the year 1864 observations were made for ascertaining the temperature-co-efficient by heating the magnet by hot air. The deflecting magnet was placed in a copper box planted upon the top of a copper gas-stove, whose heat could be regulated by manipulation of a tap, and from which rose a stream of heated air (not the air vitiated by combustion) through a large opening in the bottom of the box. With this apparatus, the force that acted upon a deflected magnet was measured by the tangent of the angle of deflection. The apparent effect of the temperature was so great (five or six times that found by use of water) that I imagine that some untraced cause of error existed in the operation, and I therefore abstain from publishing it.

The method of observing with the horizontal-force magnet is the following:—

A fine vertical wire is fixed in the field of view of the telescope, which is directed to the plane mirror carried by the magnet. On looking into the telescope, the graduations of the fixed scale, mentioned in page xvii, are seen; and during the oscillations of the magnet, the divisions of the scale are seen to pass alternately right and left across the wire. The clock-time, for which the position of the magnet is to be determined, is the same as that for the observation of declination. The first observation is made by the observer applying his eye to the telescope 40^s before that time, and, if the magnet is in a state of vibration, he observes the next four extreme points of vibration of the scale, and the mean of these is adopted in the same manner as for the declination-observations; but if it is at rest, then at 10^s before the pre-arranged time, he notes the division of the scale bisected by the wire; and 20^s afterwards he notes whether the same division continues bisected, and if it does, that reading is adopted as the result.

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* By inadvertence in printing the Introduction 1847, the letter t has been used in two different senses.

The number of instances when the magnet was observed in a state of vibration during the year 1865 is very small.

Within the double box is suspended a thermometer, which is read at every hour of observation. On two days also of every week, beginning with March 27, the readings of the thermometer were taken at 21^h, 22^h, 23^h, 0^h, 1^h, 2^h, 3^h, and 9^h. Commencing with the month of June 1863, self-registering maximum and minimum thermometers were placed outside the box, and were read twice every day. All these readings are printed in the tables, with this exception only, that, when there are two maxima and two minima, the absolute maximum and absolute minimum only are printed.

§ 5. *Photographic self-registering Apparatus for Continuous Record of Magnetic Horizontal Force.*

Much of the description of the photographic apparatus attached to the declination-magnet applies also to that which is attached to the horizontal-force-magnet. A concave mirror of speculum-metal, 4 inches in diameter, is carried by the magnet-carrier. The light of a lamp of naphthalized gas shines through a small aperture 0$^{in.}$·3 high, and 0$^{in.}$ 01 broad (which is supported by the solid base of the brick pier carrying the magnet-support), at the distance of about 21·25 inches from the concave mirror, and is made to converge to a point, on the north surface and near the east end of the same revolving cylinder which receives the light from the concave mirror of the declination-magnet. A cylindrical lens parallel to the axis of the cylinder receives the somewhat elongated image of the source of light, and converts it into a well-defined spot. The motions of this spot parallel to the axis represent the angular movements of the magnet which are produced by an increase of terrestrial magnetic force overcoming more completely the torsion-force of the bifilar suspension, or by a diminution of terrestrial force yielding to the torsion-force.

As the spot of light from the horizontal-force-mirror falls on the side of the cylinder opposite to that on which the light from the declination-mirror falls, the same time-scale will not apply to both; it is necessary to prepare a time-scale independently for each.

The following is the calculation by which the scale of horizontal force on the photographic sheet is determined. The distance between the surface of the concave mirror and the surface of the cylinder is 134·436 inches; consequently, one degree of angular motion of the magnet, producing two degrees of angular motion of the reflected ray, moves the spot of light through 4·6927 inches. Now the variation of horizontal force (in terms of the whole horizontal force) corresponding to one degree of angular motion of the magnet $= \sin 1^\circ \times \text{cotan } 40^\circ.\ 58'. = 0{\cdot}020102$ nearly. From these numbers it is immediately found that a movement of the spot of light through 2·3345 inches corresponds to a variation of horizontal force expressed by 0·01. With this fundamental number, the graduations of the pasteboard scale for measure of horizontal force have been prepared.

§ 6. *Vertical-Force-Magnet, and Apparatus for observing it.*

The vertical-force-magnet in use to 1848 was made by Robinson; that in use from 1848 to 1864, January 20, was probably by Barrow. The magnet now in use is by Simms. Its length is $1^{\text{ft.}}\ 6^{\text{in.}}$; it is pointed at the ends. After some trials, it was re-magnetized by Mr. Simms on 1864, June 15. Between 1864, August 27, and September 27, a new knife-edge was attached to it, to remedy a defect which, as was afterwards found, arose from a cause that had no relation to the knife-edge. Its supporting frame rests upon a solid pier, built of brick and capped with a thick block of Portland stone, in the western arm of the magnetic basement. Its position is as nearly as possible symmetrical with that of the horizontal-force-magnet in the eastern arm. Upon the stone block is fixed the supporting frame, consisting of two pillars (connected at their bases) on whose tops are the agate planes upon which vibrate the extreme parts of the knife-edge (to be mentioned immediately). The carrier of the magnet is an iron frame, to which is attached, by clamps and pinching screws, a steel knife-edge, about 8 inches long. The steel knife-edge passes through an aperture in the magnet. The axis of the magnet is as nearly as possible transverse to the meridian, its marked end being E. The axis of vibration is as nearly as possible N. and S. To the southern end of the iron frame, and projecting further south than the end of the knife-edge, is fixed a small plane mirror, whose plane makes with the axis of the magnet an angle of $52\frac{3}{4}^\circ$ nearly. The fixed telescope (to be mentioned) is directed to this mirror, and by reflexion at the surface of the mirror it views a vertical scale (to be mentioned shortly). The height of this mirror above the floor is about $2^{\text{ft.}}\ 10^{\text{in.}}{\cdot}6$. Before the introduction of the photographic methods, the magnet was placed in a perforation of a brass frame midway between its knife-edges. But since the photographic method was introduced, the magnet has been placed excentrically; the distance of its southern face from the nearest end of the southern knife-edge, being nearly 2 inches, and a space of $4\frac{1}{2}$ inches in the northern part of the iron frame being left disposable. In this disposable space there is attached to the iron frame by three clips a concave mirror of speculum-metal, 4 inches in diameter, with its face at right angles to the length of the magnet; it is used in the photographic system (shortly to be described). Near the north end of the iron frame are fixed in it two screw-stalks, upon which are adjustible screw-weights; one stalk is horizontal, and the movement of its weight affects the position of equilibrium of the magnet (which depends on the equilibrium between the moments of the vertical force of terrestrial magnetism on the one hand and of the magnet's center of gravity on the other hand); the other stalk is vertical, and the movement of its weight affects the delicacy of the balance, and varies the magnitude of its change of position produced by a change in the vertical force of terrestrial magnetism.

The whole is inclosed in a double rectangular box, similar to those used for the declination-magnet and the horizontal-force-magnet. This box is based upon the stone block above mentioned; and in it, in a space separated from the rest by a thin partition, the magnet can vibrate freely in the vertical plane. In the south side of the box is a hole covered by glass, through which pass the rays of light from the scale to the plane mirror, and through which they are reflected from the plane mirror to the telescope. And at the east end is a large hole covered by glass, through which passes the light from the lamp to the concave mirror, and through which it is reflected to the photographic cylinder (to be described hereafter).

The telescope is fixed to the west side of the brick pier which supports the stone pier in the upper room carrying the declination-theodolite. Its position is symmetrical with that of the telescope by which the horizontal-force-magnet is observed; so that a person seated in a convenient position can, by an easy motion of the head left and right, observe the vertical-force and horizontal-force-magnets.

The scale is vertical: it is fixed to the pier which carries the telescope, and is at a very small distance from the object-glass of the telescope. The wire in the field of view of the telescope is horizontal. The telescope being directed towards the mirror, the observer sees in it the divisions of the scale passing upwards and downwards over the fixed wire as the magnet vibrates. The numbers of the scale increase from top to bottom; so that, when the magnet is placed with its marked end towards the East, increasing readings (as seen with the fixed telescope) denote an increasing vertical force.

Observations relating to the permanent Adjustments of the Vertical-Force-magnet.

1. Determination of the compound effect of the declination-magnet, the horizontal-force-magnet, and the iron affixed to the electrometer pole, on the vertical-force-magnet.

The experiments applying to the magnets are given in the volumes for 1840–1841 to 1845: and those applying to the electrometer pole in the volume for 1842. It appeared that no sensible disturbance was produced on the magnet formerly in use. No experiments have been made with the new magnet.

2. Determination of the time of vibration of the vertical-force-magnet in the vertical plane.

In the year 1865, vibrations of the vertical-force-magnet were observed on 144 different days, and with readings of various divisions of the scale. The mean times of vibration adopted were, from 1864, October 19, to 1865, January 1, $12^{s}\cdot67$; January 2 to January 31, $15^{s}\cdot00$; February 1 to February 12, $14^{s}\cdot69$; February 13 to February 27, $14^{s}\cdot47$; February 28, $14^{s}\cdot69$; March 1 to October 16, $13^{s}\cdot12$; October 17 to December 31, $12^{s}\cdot88$.

3. Determination of the time of vibration of the vertical-force-magnet in the horizontal plane.

1864, October 10. The magnet with all its apparatus was suspended from a tripod in the Record Room, its broad side being in a plane parallel to the horizon; therefore, its moment of inertia was the same as when it is in observation. A telescope, with a wire in its focus, was directed to the reflector carried by the magnet. A scale of numbers was placed on the floor of the Record Room, at right angles to the long axis of the magnet, or parallel to the mirror. The magnet was observed only at times when it was swinging through a small arc. From 800 vibrations, the mean time of one vibration $=14^{s}\cdot5966$. This number is used through the year 1865.

4. Computation of the angle through which the magnet moves for a change of one division of the scale; and calculation of the disturbing force producing a movement through one division, in terms of the whole vertical force.

The distance from the scale to the mirror is 186·07 inches, and each division of the scale $=\frac{12}{30\cdot85}$ inches. Hence the angle which one division subtends, as seen from the mirror, is $7'.\ 11''\cdot19$; and therefore the angular movement of the normal to the mirror, corresponding to a change of one division of the scale, is half this quantity, or $3'.\ 35''\cdot60$.

But the angular movement of the normal to the mirror is not the same as the angular movement of the magnet; but is less in the proportion of unity to the cosine of the angle which the normal to the mirror makes with the magnet, or in the proportion of unity to the sine of the angle which the plane of the mirror makes with the magnet. This angle has been found to be $52\frac{3}{4}^{\circ}$: therefore, dividing the result just obtained by sine $52\frac{3}{4}^{\circ}$, we have, for the angular motion of the magnet corresponding to a change of one division of the scale, $4'.\ 30''\cdot85$.

From this, the value, in terms of the whole vertical force, of the disturbing force producing a change of one division, is to be computed by the formula, "Value of Division in terms of radius × cotan. dip × $\frac{T'^2}{T^2}$" where T' is the time of vibration in the horizontal plane, and T the time of vibration in the vertical plane.

For 1865, January 1, T′ was assumed = 14ˢ·60, T = 12ˢ·67, dip = 68°.2′. From January 2 to January 31 the numbers were 14ˢ·60, 15ˢ·00, 68°. 3′. 22″. From February 1 to 12, 14ˢ·60, 14ˢ·69, 68°. 3′. From February 13 to 27, 14ˢ·60, 14ˢ·47, 68°. 1′. 23″. On February 28, 14ˢ·60, 14ˢ·69, 68°. 3′. From March 1 to October 16, 14ˢ·60, 13ˢ·12, 68°. 2′. From October 17 to December 31, 14ˢ·60, 12ˢ·88, 68°. 4′.

From these are found the following values of the change of vertical force (in terms of the whole vertical force) corresponding to a change of one division of the scale. For January 1, 0·00070296; January 2 to January 31, 0·00050096; February 1 to 12, 0·00052248; February 13 to February 27, 0·00053922; February 28, 0·00052248; March 1 to October 16, 0·00065556; October 17 to December 31, 0·00067908.

5. Investigation of the temperature-correction of the vertical-force-magnet.

The only attempt which has been made to investigate the thermometric correction of the new vertical-force-magnet is by the use of heated air, at the same time and in the same manner as for the horizontal-force-magnet (mentioned on page *xxi*). The results were so much larger than I expected, that I conceive some unknown cause of error to have affected them. In consequence of this, no correction has been applied to the observations with the new vertical-force magnet.

The method of observing with the vertical-force-magnet is the following:—

A fine horizontal wire is fixed in the field of view of the telescope, which is directed to the small plane mirror carried by the magnet. On looking into the telescope, the graduations of the fixed vertical scale are seen; and during the oscillations of the magnet, the divisions of the scale are seen to pass alternately upwards and downwards across the wire. The clock-time, for which the position of the magnet is to be determined, is the same as that for the other two magnets. The observer applies his eye to the telescope about two vibrations before the arranged time, and if the magnet is in motion he observes its places at four extreme vibrations; and the mean of these is taken as for the horizontal-force-magnet. But if the magnet is at rest, then at one-half time of vibration before the arranged time, and at an equal interval after the arranged time, the division of the scale is noted; if there is a slight difference, the mean is taken.

The number of instances in 1865 in which the magnet was found in a state of vibration is very small.

Within the double box is suspended a thermometer, which is read at every hour of observation, and also, on two days of every week, commencing with March 27, at the hours 21ʰ, 22ʰ, 23ʰ, 0ʰ, 1ʰ, 2ʰ, 3ʰ, and 9ʰ, in the same manner as that of the horizontal-force-instrument.

A maximum and a minimum thermometer are attached to the outside of the box, and are read twice daily; the absolute maximum and absolute minimum derived from these are printed, as well as the thermometer readings above-mentioned, in the same manner as those for the horizontal force.

§ 7. *Photographic self-registering Apparatus for Continuous Record of Magnetic Vertical Force.*

The concave mirror which is carried by the vertical-force-magnet has been described in the last article. At the distance of about 22 inches from that mirror, and external to the box, is the horizontal aperture, about $0^{\text{in}}\cdot 3$ in length and $0^{\text{in}}\cdot 01$ in breadth, carried by the same stone block which carries the supports of the agate planes. The lamp which shines through this aperture is carried by the same block. The light reflected from the mirror passes through a cylindrical lens with its axis vertical, very near to the cylinder carrying the photographic paper, and finally forms a well-defined spot of light on the cylinder of paper, at the distance of 100·18 inches from the mirror. As the movements of the magnet are vertical, the axis of the cylinder is vertical. The cylinder is about 15½ inches in circumference, or somewhat larger than that used for the declination and horizontal-force magnets. The forms of the exterior and interior cylinders, and the method of mounting the paper, are in all respects the same as for the declination and horizontal-force magnets; but the cylinder is supported by being merely planted upon a circular horizontal plate (its position being defined by fitting a central hole in the metallic cap of the cylinder upon a central pin in the plate), which is turned by watchwork once in twenty-four hours. The trace of the vertical-force-magnet is on the west side of the cylinder.

On the east side, the cylinder receives the trace produced by the barometer (to be described hereafter). A pencil of light from the lamp which is used for the barometer shines through a fixed aperture with a small cylindrical lens, for tracing a photographic base-line upon the cylinder of paper, similar to that for the cylinder of the declination and horizontal-force magnets.

The scale for the ordinates of the photographic curve of the vertical force is thus computed. Remarking that the radius which determines the range of the motion of the spot of light is double the distance 100·18 inches, and is therefore = 200·36 inches, the formula used in the last section, when applied to $\frac{\text{disturbing force}}{\text{whole vertical force}} = 0\cdot 01$, gives value of division $= 200\cdot 36 \times \text{tan. dip.} \times \left(\frac{\text{T}}{\text{T}'}\right)^2 \times 0\cdot 01$. The values of the ordinate of the photographic curve for $\frac{\text{disturbing force}}{\text{whole vertical force}} = 0\cdot 01$, thus obtained, are for the several portions of the year mentioned in the last section, in inches, 3·7425, 5·2515, 5·0352, 4·8789, 5·0352, 4·0131, 3·8741. With these values, the pasteboard scales used for measuring the photographic ordinates have been prepared.

§ 8. *Dipping Needles, and Method of observing the Magnetic Dip.*

The instrument with which all the dips in the year 1865 have been observed, is that which, for distinction, is called Airy's instrument. The following description will probably suffice to convey an idea of its peculiarities :—

The form of the needles, the form of their axes, the form of the agate bearings, and the general arrangement of the relieving apparatus, are precisely the same as those in

Robinson's and other needles. But the form of the observing apparatus is greatly modified, in order to secure the following objects :—

I. To obtain a microscopic view of the points of the needles, as in the instruments introduced by Dr. Lloyd and Lieut.-General Sabine.

II. To possess at the same time the means of observing the needles while in a state of vibration.

III. To have the means of observing needles of different lengths.

IV. To give an illumination to the field of view of each microscope, directed from the side opposite to the observer's eye, so that the light may enter past the point of the needle into the object glass of the microscope, forming a black image of the needle-point in a bright field of view.

V. To give facility for observing by day or night.

With these views, the following form is given to the apparatus :—

The needle, and the bodies of the microscopes, are inclosed in a square box. The base of the box, two vertical sides, and the top, are made of gun-metal (carefully selected to insure its freedom from iron); but the sides parallel to the plane of vibration of the needle are of glass. Of the two glass sides, that which is next the observer is firmly fixed; it is hereafter called "the graduated glass-plate." The other glass side can be withdrawn, to open the box, for inserting the needle, &c.

An axis, whose length is perpendicular to the plane of vibration of the needles, and is as nearly as possible in the line of the axis of the needle, supported on two bearings (of which one is cemented in a hole in the graduated glass-plate, the other being upon a horizontal bar near to the agate support of the needle-axis), carries a transverse arm, about 11 inches long, or rather two arms, projecting about 5½ inches on each side of the axis. Each of these projecting arms has a long opening, or slot, about 1 inch wide, extending from the neighbourhood of the center-work nearly to the end of the arm. Through this opening the tube of a microscope passes, in a direction parallel to the axis of the needle, and is firmly fixed by a shoulder-bearing on one side of the arm, and a circular nut, working in a thread cut upon the microscope-tube, on the other side of the arm. The microscope can thus be fixed at any distance from the central axis, within the limits of the length of the projecting arm. In 1863, between February 24 and May 11, the slot for a single moveable microscope on each side was changed for three fixed microscopes on each side, adapted in position to the lengths of the needles to be mentioned shortly.

The microscope-tube thus carried is not the entire microscope, but so much as contains the object-glass and the field-glass. Upon the plane side of the field-glass (which is turned towards the object-glass), a series of parallel lines is engraved by etching with fluoric acid. The object-glass is so adjusted that the image of the needle-point is formed upon the plane side of the field-glass; and thus the parallel lines can be used for observing the needle in a state of vibration; and, one of them being adopted as standard, the lines can be used for reference to the graduated circle (to be mentioned). All this requires that there be an eye-glass also for the microscope.

The axis of which we have spoken is continued through the graduated glass-plate, and there it carries another transverse arm parallel to the former, and generally similar to it. In each part of this slides a short eye-piece, carrying the eye-glass. In 1863, at the time mentioned above, the slotted arm and moveable eye-socket were changed for an arm with three sockets and eye-glasses. Thus, reckoning from the observer's eye, there are the following parts:—

(1.) The eye-glass.

(2.) The graduated glass-plate (its graduations, however, not intervening in this part of the glass, the graduated circle being so large as to include all the microscopes).

(3.) The field-glass, on the further surface of which the parallel lines are engraved.

(4.) The object-glass.

(5.) The needle.

(6.) The removeable glass side of the box.

(7.) The illuminating reflector, to be described hereafter.

The optical part of the apparatus being thus described, we may proceed to speak of the graduated circle.

The graduations of the circle (whose diameter is about $9\frac{3}{4}$ inches) are etched on the inner surface of the graduated glass-plate. These divisions (as well as the parallel lines on the field glasses of the microscopes) are beautifully neat and regular, and are, I think, superior to any that I have seen on metal. The same piece of metal, which carries the transverse arms supporting the microscope bodies, carries also two arms with verniers for reading their graduations. These verniers (being adapted to transmitted light) are thin plates of metal, with notches instead of lines. The reading of the verniers is very easy. The portion of the axis which is external to the graduated glass-plate (towards the observer), and which has there, as already stated, two arms for carrying the microscope eye-glasses, has also two arms for carrying the lenses by which the verniers and glass-plate graduations are viewed. These four arms are the radii of a circle, which can be fixed in position by a clamp, attached to the gun-metal casing of the graduated glass-plate, and furnished with the usual slow-motion screw.

The entire system of the two arms carrying the microscope-bodies, the two arms carrying the microscope eye-glasses, the two arms carrying the verniers, and the two arms carrying the reading-glasses for the verniers, is turned rapidly by means of a button on the external side of the graduated glass-plate, or is moved slowly by means of the slow-motion screw just mentioned.

It now remains only to describe the illuminating apparatus. On the outside of the removeable glass plate, there are supports for the axis of a metallic circle turning in a plane parallel to the plane of needle-vibration. This circle has four slotted radii, and in these slots or openings there slide small frames carrying prismatic glass reflectors, each of which can turn on an axis, in the plane of the circle but transverse to the radius. Two of these reflectors are for the purpose of sending light through the verniers, and therefore are fixed in radial distance; the other two were intended for sending light past the ends of the needle through the microscopes, and therefore required adjustment on change of needle and corresponding change of position of microscopes. In 1863 these were changed for fixed reflectors, corresponding to the fixed microscopes. The circle was originally turned by a small winch near the observer's hand; at present, the winch is removed, as its axis was found to be slightly magnetic. At each observation, it is necessary to turn the circle which carries the reflectors; but this is the work of an instant.

The light which illuminates the whole is a gas-burner, in the line of the axis of rotation. Its rays fall upon the glass prisms, and each of these is adjusted, by turning on its axis, to throw the reflected light in the required direction.

The whole of the apparatus, as thus described, is planted upon a horizontal plate admitting of rotation in azimuth: the plate is graduated in azimuth, and verniers are fixed to the gun-metal tripod stand. The gas-pipe is led down the central vertical axis, and there communicates by a rotatory joint with the fixed gas-pipes.

The needles which are used with this instrument are—

B_1, a plain needle	each 9 inches long.
B_2, a plain needle	
B_3, a loaded needle with adjustible load	
B_4, a needle whose plane passes through the axis of the needle	
C_1, a plain needle	each 6 inches long.
C_2, a plain needle	
C_3, a loaded needle with adjustible load	
C_4, a needle whose plane passes through the axis of the needle	
D_1, a plain needle	each 3 inches long.
D_2, a plain needle	
D_3, a loaded needle with adjustible load	
D_4, a needle whose plane passes through the axis of the needle	

In discussing carefully the observations taken with this instrument (as well as with other dip-instruments), great trouble was experienced in determining the zenith-point (or reading of the vertical circle when the points of the needle are in the same vertical). To remedy this, a "zenith-point-needle" was constructed under my instructions by Mr. Simms; and it has been used as need required in 1864 and 1865. It is a flat bar of brass; with pivots similar to those of the dip-needles; and with three pairs of points corresponding to the three lengths of needles used; loaded at one end so as to take a position perfectly definite with respect to the direction of gravity; observed with the microscopes, and reversed for another observation, exactly as the dip-needles. For each of the different lengths of dip-needles, the zenith-point is determined by observation of that pair of points of the zenith-point-needle whose interval is the same as the length of the dip-needle.

Discordances, of which no satisfactory explanation could be given, had been found in the ordinary use of the instrument for determination of dip, as well as in the change of readings when a needle was raised and lowered, and in the change of readings when, without raising the needle, the instrument was turned completely in azimuth. Between November 10 and November 19, 1864, Mr. Simms reground the agate edges on which the needle-pivots rotate; and the discordances have entirely or in great measure disappeared. The process of regrinding was merely the following. A brass tool was provided which nearly fitted the agates, and which permitted lengthwise-strokes but scarcely permitted cross-strokes; and this tool carried, in succession, the different powders required for shaping and polishing the agate edges. As the edges were pretty well shaped, it was scarcely necessary to use coarse emery; but fine emery was used in the tool to give a final figure, and tin-oxide to give the ultimate polish. The process scarcely differs from that by which the edges had been ground originally; except that a tool had formerly been used which perhaps admitted of too much cross-stroke, and that rotten-stone powder had been used instead of tin-oxide.

The flat needles B_4, C_4, D_4, were used with the object of determining whether any part of the discordances of results arose from the position of the principal plane of the magnetized needle. But with the increased harmony of results, an error showed itself which is peculiar to their form. The small flexure of the needle, produced by the resolved part of gravity in the direction perpendicular to the needle's length, changes the position of its centre of gravity in such a manner that the action of gravity is necessarily opposed to that of the magnetic vertical force; and thus the apparent dip is made too small. This error is perhaps insensible in the 3-inch needle D_4, but it is visible in the 6-inch needle C_4, and conspicuous in the 9-inch needle B_4. In the tables of results, therefore, while I have included all the separate results from these needles, I have omitted them in the formation of means. After 1865, July, the flat needles were not used for dip observations.

On 1865, December 30, every part of the instrument was carefully examined by Mr. Simms, and needles C_1 and D_1 were removed for further examination.

§ 9. *Observations for the absolute Measure of the Horizontal Force of Terrestrial Magnetism.*

In the spring of 1861, a Unifilar Instrument, similar in all respects (as is understood) to those used in and issued by the Kew Observatory, was procured by the courteous application of Lieut.-General Sabine, from the makers, Messrs. J. T. Gibson and Son; and after having been subjected to the usual examinations, at the Kew Observatory, for determination of its constants (for which I am indebted to the kindness of Balfour Stewart, Esq.), was mounted at the Royal Observatory. Observations with this instrument commenced on 1861, June 11, and were continued through the year; and, after some slight modifications of its verniers, it is still maintained in use (1867).

The deflected magnet (whose use is merely to ascertain the proportion which the power of the deflecting magnet at a given distance bears to the power of terrestrial magnetism) is 3 inches long, carrying a small plane mirror. The deflecting magnet is 4 inches long; it is a hollow cylinder, carrying in its internal tube a collimator, by means of which its time of vibration is observed in another apparatus. The frame which supports the suspension-piece of the deflected magnet carries also the telescope directed to the magnet-mirror; it rotates round the vertical axis of a horizontal graduated circle whose external diameter is 10 inches. The deflecting magnet is always placed on the E. or W. side of the deflected magnet, with one end towards the deflected magnet. In the reduction of the observations, the precepts contained in the Skeleton Form prepared by the Kew Observatory have received the strictest attention.

The following is the explanation of the method of reduction.

The distance of the centers of the deflected and deflecting magnet being known, it is supposed (from observations made at Kew, of which the details have not reached me) that the magnetism of the deflecting magnet is so altered by induction that the following multipliers ought to be used in computing the Absolute Force:—

At distance	1·0 foot, factor is	1·00031
	1·1	1·00023
	1·2	1·00018
	1·3	1·00014
	1·4	1·00011
	1·5	1·00009

The correction of the magnetic power for temperature t_0 of Fahrenheit, reducing all to 35° of Fahrenheit, is

$$0·000131261\,(t_0-35)+0·000000259\,(t_0-35)^2$$

A_1 is $\frac{1}{2}(\text{distance})^3 \times$ sine deflection, corrected by the two last-mentioned quantities, for distance 1·3 foot; A_2 is the similar expression for distance 1·3 foot; A'_2 is $\frac{A_2}{(1·3)^2}$: P is $\frac{A_1-A_2}{A_1-A'_2}$. A mean value of P is adopted from various observations; then $\frac{m}{X}=A_1\times\left(1-\frac{P}{1}\right)$ for smaller distance, or $=A_2\times\left(1-\frac{P}{1·69}\right)$ for larger distance. The mean of these is usually adopted for the true value of $\frac{m}{X}$.

For computing the value of mX from observed vibrations, it is necessary to know K, the moment of inertia of the magnet as mounted. The value of log. π^2K furnished by Mr. Stewart is 1·66073 at temperature 30° and 1·66109 at temperature 90°. Then, putting T for the time of the magnet's vibration as corrected for induction, temperature, and torsion-force, the value of mX is $=\frac{\pi^2K}{T^2}$. From the combination of this value of mX with the former value of $\frac{m}{X}$, m and X are immediately found.

It appears, from a comparison of observations given in the Introduction to the *Magnetical and Meteorological Observations*, 1862, that the determinations with the Old Instrument (in use to 1861) ought to be diminished by $\frac{1}{117}$ part, to make them comparable with those of the Kew Unifilar.

The computation of the values of m and X has, to the year 1857, been made in reference to English measure only, using the foot and the grain as the units of length and weight; but, for comparison with foreign observations of the Absolute Intensity of Magnetism, it is desirable that X should be expressed also in reference to French measure, in terms of the millimètre and milligramme. If an English foot be supposed equal to α times the millimètre, and a grain be equal to β times the milligramme, then it is seen that, for the reduction of $\frac{m}{X}$ and mX to French measure, these must be multiplied by α^3 and $\alpha^2\beta$ respectively. Hence X^2 must be multiplied by $\frac{\beta}{\alpha}$, and X by $\sqrt{\frac{\beta}{\alpha}}$. Assuming that the mètre is equal to 39·37079 inches, and the gramme equal to 15·43249 grains, log. $\sqrt{\frac{\beta}{\alpha}}$ will be found to be $=$ 9·6637805, and the factor for reducing the English values of X to French values will be 0·46108 or $\frac{1}{2\cdot1689}$. The values of X in French measure thus derived from those in English measure are given in the proper table.

§ 10. *Explanation of the Tables of Indications of the Magnetometers.*

The Indications are derived entirely from the measures of the ordinates of the Photographic Curves, except in a few instances in which the results are marked with an asterisk, in which case the results are those given by eye-observations, usually because the photographic process has failed.

Telescope-observations of the Magnetometers have usually been made four times every day, except on Sundays, on which days two or three observations only have been taken; but, though these observations are employed in forming the base lines on the photographic sheets, their immediate results are not necessarily given in the Tables.

For each photographic record, a new base-line, representing a convenient reading in round numbers of the element to which it applies, has been drawn on the sheet. Then the Assistant, who is charged with the translation of the curve-ordinates into numbers, remarks the salient points of the curve, or the points which if connected by straight lines would produce a polygon not sensibly differing from the photographic curve; to each of these he applies the pasteboard scale proper for the element under consideration; the base of the pasteboard scale determines the time on the time-scale, and the reading of the pasteboard scale for the point of the photographic curve gives the quantity which is to be added to the value for the new base-line. The ordinate-reading so formed is printed without alteration in the Tables. It is particularly to be remarked that the indications for horizontal force and vertical force are *not corrected for temperature.*

In measuring the ordinates of the Vertical Force Curves, the same difficulty that is mentioned in preceding volumes has still occasionally, though rarely, been felt. Apparently without cause, the curve is dislocated; one part being raised above or depressed below the contiguous part, in the direction of the ordinate, usually by small quantities. In all cases the displacement is accompanied by vibration, the original position being at the extremity of the arc of vibration, and the new position being at its center; showing that there has been no want of delicacy in the movement, and that the change is precisely the same as would be caused by the quiet application of a small weight upon one end of the magnet.

In translating the ordinates into numbers on these occasions, two ordinates have been taken for the same abscissa; these are connected, in the printed Indications, by a brace, and the difference of the numbers indicates the amount of the disturbance.

§ 11. *Wires and Photographic self-registering Apparatus for continuous Record of Spontaneous Terrestrial Galvanic Currents.*

In order to obtain an exhibition of the spontaneous galvanic currents which in some measure are almost always discoverable in the earth, and which occasionally are very powerful, it was necessary to extend two insulated wires from an earth connexion at the Royal Observatory, in two directions nearly at right angles to each other, to considerable distances, where they would again make connexion with the earth. By the kindness of the Directors of the South Eastern Railway Company, to whom the Royal Observatory has on several occasions been deeply indebted, two connexions are made; one to a station near Dartford, at the direct distance $9\frac{3}{4}$ miles nearly, in azimuth (measured from North, to East, South, West), 102° astronomical or 122° magnetical, the length of the connecting wire being about $15\frac{2}{3}$ miles; the other to a station near Croydon, at the direct distance 8 miles, in azimuth, 209° astronomical, or 229° magnetical, the length of the connecting wire being about $10\frac{1}{2}$ miles. At these two stations connexion is made with earth. The details of the course are as follows. The wires are soldered to a water pipe in the Magnetic Ground at the Royal Observatory. Thence they enter the Magnetic Basement, and pass through the photographic self-registering apparatus (to be shortly described). From it they are led up the electrometer mast to a height exceeding 50 feet, and thence they are swung across the grounds to a chimney above the Octagon Room. They descend thence, and are led to a terminal board in the Computing Room, to which an intermediate galvanometer can be attached for eye-observation of the currents. From this point they are led to the "Battery Basement," and, with other wires, pass under the Park to the Greenwich Railway Station, and upon the telegraph poles. One wire branches off at the junction with the North Kent Railway to Dartford, the other at the junction with the Croydon Branch Railway to Croydon. At both places their connexion with earth is made by soldering to waterpipes, as at the Royal Observatory.

The apparatus for receiving the effects of the galvanic currents consists essentially of two magnetic needles (one for each wire), each suspended by a hair so as to vibrate horizontally within a galvanic coil, exactly as in the ordinary speaking telegraph; these coils being respectively in the courses of the two long wires. A current of one kind, in either wire, causes the corresponding needle to turn itself through an angle nearly proportioned to the strength of the current, in one direction; a current of the opposite kind causes it to turn in the opposite direction. These turnings are registered by the following apparatus.

The carrier of each magnet carries also a small plane mirror, which receives all the azimuthal motions of the magnet. The light of a gas-lamp passes through a minute aperture, and shines upon it; the divergent pencil is converted into a convergent pencil by refraction through crossed cylindrical lenses (with axes vertical before the pencil reaches the mirror, and with axes horizontal where the pencil is received from the mirror), which, under the circumstances, were more convenient than spherical lenses. A spot of light is thus formed upon the photographic paper wrapped upon a cylinder of ebonite, covered by a glass cylinder, and made to rotate in twenty-four hours by clock-work, exactly as for the register of the magnetic elements. As in the case of declination and horizontal-force, the two earth currents make their registers upon opposite sides of the same barrel, and upon different parts of the sheet; the same gas-light serving for the illumination of both.

A portion of a base-line for either record is obtained at any time by simply breaking the galvanic communication.

The photographic records have been regularly made since 1865, March 15; but no actual reduction of the results, or numerical comparison of earth-currents with magnetic disturbances, has yet been made.

§ 12. *Standard Barometer.*

The Barometer is a standard, by Newman, mounted in 1840. It is fixed on the South wall of the West arm of the Magnetic Observatory. The graduated scale which measures the height of the mercury is made of brass, and to it is affixed a brass rod, passing down the inside of one of the upright supports, and terminating in a conical point of ivory; this point in observation is made just to touch the surface of the mercury in the cistern, and the contact is easily seen by the reflected and the actual point appearing *just* to meet each other. The rod and scale are made to slide up and down by means of a slow-motion screw. The scale is divided to $0^{\text{in.}}05$.

The vernier subdivides the scale divisions to $0^{\text{in.}}002$; it is moved by a slow-motion screw, and in observation is adjusted so that the ray of light, passing under the back and front of the semi-cylindrical plate carried by the vernier, is a tangent to the highest part of the convex surface of the mercury in the tube.

The tube is $0^{\text{in.}}565$ in diameter; the correction for the effect of capillary attraction is therefore only $+ 0^{\text{in.}}002$. The cistern is of glass.

At the bottom of the instrument are three screws, turning in the fixed part of the support, and acting on the piece in which the lower pivot of the barometer-frame turns, for adjustment to verticality: this adjustment is examined weekly.

The readings of this barometer are considered to be coincident with those of the Royal Society's flint-glass standard barometer.

All observations of this barometer have been corrected for the difference of temperature of the mercury in the tube at the time of observation from 32°, by the application of the corrections contained in the table for barometers whose scales are engraved upon a rod of brass reaching from the level of the mercury to the vernier. (See the report of the Committee of Physics and Meteorology approved by the Royal Society.)

The height of the cistern above the mean level of the sea is 159 feet. This element is founded upon the determination of Mr. Lloyd, in the *Phil. Trans.*, 1831; the elevation of the cistern above the brass piece inserted in a stone in the transit-room (to which Mr. Lloyd refers) being $5^{ft}.2^{in}$.

The barometer has been read at 21^h, 0^h, 3^h, 9^h (astronomical), on every day, excepting on Sundays, and on Good Friday and Christmas Day, on which days fewer observations have been taken. Every reading has been reduced to the reading which would have been obtained at the temperature 32° of the mercury and scale, by application of the correction given in Table II. (pages 82 to 87) of the Report of the Committee of Physics of the Royal Society. The mean of the reduced readings has then been taken for each civil day, and finally converted into mean daily reading, by application of the correction inferred from Mr. Glaisher's paper in the *Philosophical Transactions*, 1848, Part I, Table I, page 127.

In the printed record of the barometrical and all other meteorological observations, the day is to be understood, generally, as defined in civil reckoning.

§ 13. *Photographic self-registering Apparatus for continuous Record of the Readings of the Barometer.*

The Photographic self-registering Apparatus for continuous Record of Magnetic Vertical Force is furnished (as has been stated) with a vertical cylinder covered with photographic paper and revolving in 24 hours. North of the surface of this cylinder, at the distance of about 30 inches, is a large syphon barometer, the bore of the upper and lower extremities of its arms being about 1·1 inch. A glass float in the quicksilver of the lower extremity is partially supported by a counterpoise acting on a light lever (which turns on delicate pivots), so that the wire supporting the float is constantly stretched, leaving a definite part of the weight of the float to be supported by the quicksilver. This lever is lengthened to carry a vertical plate of opaque mica with a small aperture, whose distance from the fulcrum is eight times the distance of the point of attachment of the float wire, and whose movement, therefore, is four times the movement of the column of a cistern-barometer. Through this hole the light of a lamp, collected by a cylindrical lens, shines upon the photographic paper.

The scale of time is established by means of occasional interruptions of the light, and the scale of measure is established by comparison with occasional eye-observations.

This barometer was brought into use in 1848, but its indications were not satisfactory till the mercury was boiled in the tube by Messrs. Negretti and Zambra on 1853, August 18, since which time they have appeared unexceptionable. Results of the indications are printed in the *Maxima and Minima of the Barometer*, near the end of the Meteorological Results.

§ 14. *Thermometers for ordinary Observation of the Temperature of the Air and Evaporation.*

The Dry-Bulb Thermometer, the Wet-Bulb Thermometer, the Maximum Self-Registering Thermometers, both dry and wet, and the Minimum Self-Registering Thermometers, dry and wet, all for determination of the temperature of the air and of evaporation, are mounted on a revolving frame whose fixed vertical axis is planted in the ground. From the year 1846 to 1863 the post forming the vertical axis was about 23 feet south (magnetic) of the S.S.E. angle of the south arm of the Magnetic Observatory; in 1863 it was moved to a position about 35 feet south (astronomical) of the south angle. A frame revolves on this post, consisting of a horizontal board as base, of a vertical board projecting upwards from it connected with one edge of the horizontal board, and of two parallel inclined boards (separated about three inches) connected at the top with the vertical board, and at the bottom with the other edge of the horizontal board. The outer inclined board is covered with zinc. The air passes freely between all these boards.

The dry and wet-bulb thermometers are attached to the outside, and near the center of the vertical board; the maximum and minimum thermometers for air towards one vertical edge, and those for evaporation towards the other vertical edge, with their bulbs at almost the same level, and near to those of the dry and wet-bulb thermometers; their bulbs are about 4 feet above the ground and projecting from 2 inches to 3 inches below the horizontal board. Above the thermometers is a small projecting roof to protect them from rain. The frame is always turned with the inclined side towards the sun. It is presumed that the thermometers are thus sufficiently protected.

The graduations of all the thermometers used in the Royal Observatory rest fundamentally upon those of a Standard Thermometer, the property of Mr. Glaisher, which derives its authority from comparison with original thermometers constructed by the late Rev. R. Sheepshanks about the years 1840–1843, in the course of his preparations for the construction of the National Standard of Length. The whole of the radical determinations of Freezing Point, Boiling Point, and Subdivision of Volume of Tube, were made by Mr. Sheepshanks with the utmost care: it is believed that these were the first original thermometers that had been constructed in England for many years. Mr. Glaisher's thermometer has been adopted as the standard of reference for all the thermometers used in the Royal Observatory since 1840.

The Dry-Bulb Thermometer is by Newman. The corrections required for its readings, as found by comparison with the standard above-mentioned, are as follows:—

Below	32°	subtract 0°·5
Between	32 and 43	0·6
	44 and 47	0·7
	48 and 56	0·9
	57 and 61	1·1
	62 and 74	1·3
	75 and 80	1·5
	81 and 86	1·8
	87 and 95	2·0
	96 and 100	2·2

These corrections are used throughout the year 1865.

The Wet-Bulb Thermometer is by Negretti and Zambra. The bulb of the thermometer used till 1865, February 9, was of the same size as that of the Dry-Bulb Thermometer. A piece of muslin is wrapped round the bulb, and a skein of cotton is led from it into a cup of rain-water, by which it is maintained in a state of moisture. In frosty weather the muslin is moistened some time before each observation. The corrections which the readings of this thermometer were found to require are as follows:

Below	32°	subtract 0°·4
Between	32 and 36	0·3
	37 and 40	0·2
	41 and 55	0·1
	56 and 75	0·0
Above	75	add 0·1

This thermometer was broken on 1865, February 10; and, through the remainder of the year, a small pea-bulb thermometer by Negretti and Zambra, No. 764, was used. No correction has been made to the indications of this thermometer.

The eye-readings of the dry-bulb and wet-bulb thermometers have usually been taken at the hours (astronomical reckoning) 21^h, 0^h, 3^h, 9^h, and corrected by application of the numbers given above.

A dry-bulb and a wet-bulb thermometer, with pea-bulbs and porcelain scales, Negretti and Zambra 795, are also mounted on the roof of the library, 4 feet above the leads. Their readings are not printed in the present volume.

The dew-point has been inferred exclusively from the simultaneous observations of the dry-bulb and wet-bulb thermometers, by multiplying the difference between the readings of these thermometers by a factor peculiar to the temperature of the air, and subtracting the product from the reading of the dry-bulb thermometer. These factors have been found by Mr. Glaisher from the comparison of a great number of dew-point determinations, obtained by use of Daniell's hygrometer, with simultaneous observations of dry-bulb and wet-bulb thermometers. The first part of this investigation was published in full, in the volume of *Magnetical and Meteorological Observations* for 1844, pages 67–72; it was based upon all the observations made up to that time. Subsequently, the comparison was extended to include all the simultaneous observations of these instruments made at the Royal Observatory, Greenwich, from 1841 to 1854, with some observations taken at high temperatures in India, and others at low and medium temperatures at Toronto. The results at the same temperature were found to be the same at these different localities, so far as the climatic circumstances permitted comparison. (See Glaisher's Hygrometrical Tables, 4th Edition). The following table exhibits the result of the entire comparison; it has been used in forming the dew-points in the present volume.

Table of Factors by which the Difference of Readings of the Dry-Bulb and Wet-Bulb Thermometers is to be Multiplied in order to produce the Difference between the Readings of the Dry-Bulb and Dew-Point Thermometers.

Reading of Dry-bulb Thermometer.	Factor.	Reading of Dry-bulb Thermometer.	Factor.	Reading of Dry-bulb Thermometer.	Factor.	Reading of Dry-bulb Thermometer.	Factor.
10°	8·78	33°	3·01	56°	1·94	79°	1·69
11	8·78	34	2·77	57	1·92	80	1·68
12	8·78	35	2·60	58	1·90	81	1·68
13	8·77	36	2·50	59	1·89	82	1·67
14	8·76	37	2·42	60	1·88	83	1·67
15	8·75	38	2·36	61	1·87	84	1·66
16	8·70	39	2·32	62	1·86	85	1·65
17	8·62	40	2·29	63	1·85	86	1·65
18	8·50	41	2·26	64	1·83	87	1·64
19	8·34	42	2·23	65	1·82	88	1·64
20	8·14	43	2·20	66	1·81	89	1·63
21	7·88	44	2·18	67	1·80	90	1·63
22	7·60	45	2·16	68	1·79	91	1·62
23	7·28	46	2·14	69	1·78	92	1·62
24	6·92	47	2·12	70	1·77	93	1·61
25	6·53	48	2·10	71	1·76	94	1·60
26	6·08	49	2·08	72	1·75	95	1·60
27	5·61	50	2·06	73	1·74	96	1·59
28	5·12	51	2·04	74	1·73	97	1·59
29	4·63	52	2·02	75	1·72	98	1·58
30	4·15	53	2·00	76	1·71	99	1·58
31	3·70	54	1·98	77	1·70	100	1·57
32	3·32	55	1·96	78	1·69		

The maximum self-registering thermometer is a mercurial thermometer, of the construction invented by Messrs. Negretti and Zambra. There is a small detached piece of glass in the tube, just above a bent part of the tube (near the bulb), through which the piece of glass cannot pass down. The column of mercury in rising lifts the glass up and passes freely; but in descending it is unable to pass the glass, and the lower mass of mercury descends, leaving a vacant space below the glass, and leaving a portion of the mercury above it. The piece of glass operates as an efficient valve. The graduation of this thermometer is sensibly correct. There is a similar thermometer for the maximum wet-bulb reading; its readings are too high by 0°·4.

The minimum self-registering thermometer is an alcohol thermometer, of the construction known as Rutherford's. A sliding glass index allows the alcohol in rising to pass above it, but is drawn down by the peculiar action of the bounding surface of the fluid when it sinks. The readings of that which gives the minimum temperature of the air require an additive correction 0°·5; those of the minimum wet-bulb temperature require corrections varying from +2°·2 at 24° to −0°·2 at 71°.

The mean daily values of dry thermometer in the printed columns are found by combining two results derived from different sources. The first and simpler result is the mean of the maximum and minimum, corrected by a small quantity depending on the month, given in Table III. of Mr. Glaisher's paper in the *Philosophical Transactions*, 1848, page 130. The second result is formed by taking the means of the four eye-observations at 21^h, 0^h, 3^h, 9^h, and applying a correction thus investigated. The daily range being found by taking the difference between the maximum and minimum, this daily range is multiplied by the mean of the factors in Table IV. corresponding to the hours of observation; the application of this correction to the mean of the eye-observations gives the second result. (It is evident that this process is applicable to any number of eye-observations.) These two results are then combined to form a mean, weights being given proportional to the number of observations contributing to each result.

For the mean daily value of dew point, the usual process is,—by observing the difference between dry and wet thermometers, and by use of the table of factors printed above, to form the difference between dry thermometer and dew point at each of the hours of reading; to take their mean; to apply a correction which is the mean of the corrections in Mr. Glaisher's Table VIII. for the several hours of observation; and to apply this corrected mean difference of dry thermometer and dew point to the mean value of dry thermometer found above. Sometimes, however, the following process is used. The correction for diurnal range applicable to the mean of the eye-observations of the dry thermometer having been found (as is described above), this correction is multiplied by a fraction, whose numerator is the mean of corrections to wet bulb thermometer in Table VII. for the hours of observations, and whose denominator is the mean of corrections to dry thermometer in Table II. for the same hours; and thus a correction is found which is applied to the mean of the eye-observations of wet bulb thermometer, to form the mean wet bulb for the day. Then by use of the mean dry bulb for the day and the mean wet bulb for the day and the table of factors above, the mean dew point for the day is formed.

§ 15. *Photographic self-registering Apparatus for continuous Record of the Readings of the Dry-Bulb and Wet-Bulb Thermometers.*

About 28 feet south (magnetic) of the south-east angle of the south arm of the Magnetic Observatory, and about 25 feet east of the thermometers for eye-observations, is a shed 10 ft. 6 in. square, standing upon posts 8 feet high, under which are placed the photographic thermometers, the dry-bulb thermometer towards the east, and the wet-bulb thermometer towards the west. The bulbs of the thermometers are 8 inches in length, and 0·4 inch internal bore, and their centers are about 4 feet above the ground. The bulb of one of the thermometers is covered with muslin throughout its whole length, which is kept moist by means of capillary passage of water along cotton wicks leading to a vessel filled with water.

There are small adjustments admitting the raising or dropping of the thermometers, so that the register of their changing readings may be on a convenient part of the paper. The thermometer frames are covered by plates having longitudinal apertures, so narrow, that any light which may pass through them is completely, or almost completely, intercepted by the broad flat column of mercury in the thermometer-tube. Across these plates a fine wire is placed at every degree; and at the decades of the degrees, and also at 32°, 52°, and 72°, a coarser wire is placed. A gas lamp is placed about 9 inches from each thermometer (east of the dry bulb and west of the wet bulb), and its light, condensed by a cylindrical lens, whose axis is vertical, shines through the thermometer-tube above the surface of the mercury, and forms a well-defined line of light upon the photographic paper, which is wrapped around the cylinder. As the cylinder revolves under this light, it receives a broad sheet of photographic trace, whose breadth (in the direction of the axis of the cylinder) varies with the varying height of the mercury in the thermometer-tube. The light in its passage is intercepted by the wires placed across the tube at every degree, and there are, therefore, left upon the paper corresponding lines in which there is no photogenic action.

The cylinder revolves in 48 hours; the daily photographic traces of the two thermometers are thus simultaneously registered on opposite sides of the cylinder without intermixing. The length of the cylinder is 13½ inches, and its circumference is 19 inches.

§ 16. *Thermometers for Solar Radiation and Radiation to the Sky.*

The thermometer for Solar Radiation, which to the end of the year 1864 was placed in an open box about 10 feet south of the south-west angle of the south arm of the Magnetic Observatory, is now laid on the grass, near the same place.

The thermometer is a self-registering maximum mercurial thermometer of Negretti and Zambra's construction; its bulb is blackened, and enclosed in a glass sphere from which the air has been exhausted. Its graduations are correct, and the numbers inserted in the tables are those read from the instrument without alteration. The thermometer is read at 9^h a.m., noon, 3^h p.m., and occasionally at 9^h p.m.; the highest of these readings is adopted as the maximum for the day.

Within the box above-mentioned, and at the height 10 inches above the bottom of the box, is placed a thermometer with blackened bulb, which is not enclosed in an exhausted sphere: its readings are taken every day to the end of 1865. An instrument of this form and in this position was exclusively used to the year 1859. Simultaneous readings of both instruments have been taken, with the view of rendering the series of observations which terminated in 1859 (made with exposed bulb) comparable with that which commenced in 1859, and was continued to the end of 1864 (made with bulb inclosed in an exhausted sphere).

The thermometer for radiation to the sky is placed near to the Solar Radiation thermometer, with its bulb resting on short grass, and fully exposed to the sky. It is a self-registering minimum spirit thermometer of Rutherford's construction, made by Negretti and Zambra. Its graduation is correct, and the numbers inserted in the table are those read from the scale without alteration. It is read every day at 9^h a.m., and occasionally at 9^h p.m.

This thermometer was out of order on February 6, March 19, April 16, May 26, June 3, August 21 and 27, and November 1.

§ 17. *Thermometers sunk below the Surface of the Soil at different Depths.*

These thermometers were made by Messrs. Adie of Edinburgh, under the immediate superintendence of Professor (now Principal) J. D. Forbes. The graduation was made by Professor Forbes himself.

The thermometers are four in number. They are all placed in one hole in the ground, the diameter of which in its upper half is 1 foot, and in its lower half about 6 inches. Each thermometer is attached in its whole length to a slender piece of wood, which is planted in the hole with it. The place of the hole is 20 feet south of the extremity of the south arm of the Magnetic Observatory, and opposite the center of its south front.

The soil consisted of beds of sand; of flint-gravel with a large proportion of sand; and of flints with a small proportion of sand, cemented almost to the consistency of pudding-stone. Every part of the gravel and sand extracted from the hole was perfectly dry.

The bulbs of the thermometers are cylindrical, 10 or 12 inches long and 2 or 3 inches in diameter. The bore of the principal part of the tubes, from the bulb to the graduated scale, is very small. In that part to which the scale is attached, the tube is larger.

The thermometer No. 1 was dropped into the hole to such a depth that the center of its bulb was 24 French feet (25·6 English feet) below the surface: then dry sand was poured in till the hole was filled to nearly half its height. Then No. 2 was dropped in till the center of its bulb was 12 French feet below the surface; No. 3 and No. 4 till the centers of their bulbs were respectively 6 and 3 French feet below the surface; and the hole was then completely filled with dry sand. The upper parts of the tubes, carrying the scales, were left projecting above the surface: No. 1 by 27·5 inches, No. 2 by 28·0 inches, No. 3 by 30·0 inches, and No. 4 by 32·0 inches. Of these lengths, the parts 8·5, 10·0, 11·0, and 14·5 inches, respectively are tube with narrow bore.

The projecting parts of the tubes are protected by a wooden case or box fixed to the ground; the sides of the box are perforated with numerous holes, and it has a double roof. In the North face of this box is a large plate of glass through which the thermometers are read. Within the box are two smaller thermometers, one (No. 5) whose bulb is sunk one inch in the ground, and one (No. 6) whose bulb is in the free air nearly in the center of the box.

The fluid of the four long thermometers is alcohol tinged with a red colour.

The values of 1° on the scales of Nos. 1, 2, 3 and 4, are respectively $2^{\text{in.}}$, $1^{\text{in.}}1$, $0^{\text{in.}}9$, and $0^{\text{in.}}55$; and the ranges of the scales, as first mounted, were, 43°·0 to 52°·7, 42°·0 to 56°·8, 39°·0 to 57°·5, and 34°·2 to 64°·5.

These ranges for Nos. 2, 3, and 4, were found to be insufficient in some years, particularly those of Nos 3 and 4, or the thermometers sunk to the depth of 6 feet and 3 feet.

In 1857, June 22, Messrs. Negretti and Zambra removed from Nos. 3 and 4 a quantity of fluid corresponding to the extent of 5° on their scales, and the scales of these two thermometers were then lowered by that linear extent, making the readings the same as before. Their ranges are now, respectively, 44° to 62°·5, and 39°·2 to 69°·5.

In subsequent years it was found that the amount of fluid removed was somewhat too great, for now at the lower end of the scale the 6-foot thermometer sometimes falls below the limit of its scale or 44°; and the 3-foot thermometer below 39°·0; in which cases the alcohol sinks into the capillary tube.

The readings at the early part of the series were at times defective at high temperatures, but always complete at low temperatures; now, they are always complete at high temperatures, and are at times defective at low temperatures. The two combined, however, will enable us to complete all readings.

These thermometers are read once a day, at noon, and the readings appear in the printed volumes as read from their scales without correction.

§ 18. *Thermometers immersed in the Water of the Thames.*

The self-registering maximum and minimum thermometers for determining the highest and lowest temperatures of the water of the Thames are by Messrs. Negretti and Zambra, and are observed every day at 9^{h} a. m.

A strong wooden trunk is firmly fixed to the side of the Dreadnought Hospital Ship, about 5 feet in length, and closed at the bottom; the bottom and the sides, to the height of 3 feet, are perforated with a great number of holes, so that the water can easily flow through; the thermometers are suspended within this trunk so as to be about 2 feet below the surface of the water, and 1 foot from the bottom of the trunk.

The regular observations are made under the superintendence of the Medical Officers of the Ship.

The thermometer for maximum temperature was out of order January 1 to January 6, and both thermometers were out of order on July 9, 10, 13; August 23, 29; September 14, 15, 21; October 15, 16, 17, 18; November 22 to December 4.

§ 19. *Osler's Anemometer.*

This anemometer is self-registering: it was made by Newman, but has received several changes since it was originally constructed. A large vane, which is turned by the wind, and from which a vertical spindle proceeds down nearly to the table in the north-western turret of the ancient part of the Observatory, gives motion by a pinion upon the spindle to a rackwork carrying a pencil. This pencil makes a mark upon a paper affixed to a board which is moved uniformly in a direction transverse to the direction of the rack-motion. The movement of the board is effected by means of a second rack connected with the pinion of a clock. The paper has lines printed upon it corresponding to the positions which the pencil must take when the direction of the vane is N., E., S., or W.; and also has transversal lines corresponding to the positions of the pencil at every hour. The first adjustment for azimuth was obtained by observing from a certain point the time of passage of a star behind the vane-shaft, and computing from that observation the azimuth; then on a calm day drawing the vane by a cord to that position, and adjusting the rack, &c., so that the pencil position on the sheet corresponded to that azimuth.

For measuring the pressure of the wind, the shaft of the vane carries a plate one foot square, which is supported by horizontal rods sliding into grooves, and is urged in opposition to the wind by three springs, so arranged that only one comes into play when the wind is light, and the others necessarily act in conjunction with the first as the plate is driven further and further by the force of the wind. A cord from this plate passes over a pulley, and communicates with a copper wire passing through the center of the spindle, which at the bottom communicates with another cord passing under a pulley and held in tension by a slight spring: and by this a pencil is moved transversely to the direction in which the paper fixed to the board is carried by the clock. Lines are printed upon the paper corresponding to different values of the pressure; the intervals of these lines were adjusted by applying weights of 1 lb., 2 lbs., &c., to move the pressure-plate in the same manner as if the wind pressed it.

A rain gauge of peculiar construction is carried by this instrument, by which the fall of rain is registered with reference to the time of the fall. It is described in § 21.

A fresh sheet of paper is applied to this instrument every day at 22^h mean solar time.

§ 20. *Robinson's Anemometer.*

This anemometer is self-registering, (not continuously self-registering, but requiring to be read from time to time), and was made by Messrs. Negretti and Zambra on the principles described by Dr. Robinson in the Transactions of the Royal Irish Academy, vol xxii. It is furnished with four hemispherical cups [each being 3·75 inches in diameter], attached to the extremities of two arms at right angles to each other, and revolving in a horizontal plane by the excess of pressure of the wind on their concave over that on their convex surfaces.

The distance between the centers of opposite cups is 13·45 inches, and their centers describe 42·24 inches in each revolution, indicating, according to the theory, a horizontal movement of the air of 126·72 inches for each revolution, and of one mile for 500 revolutions. The accuracy of this theory was verified by experiments made in 1860 (to be described immediately). The horizontal arms are connected with a vertical spindle, upon which is an endless screw, working in a toothed wheel connected with a train of wheels, furnished with indices capable of registering one mile and decimal multiples of a mile up to 1,000 miles. The instrument is read every day at 22^{h}.

In the year 1860, on July 3, 4, and 13, experiments were made in Greenwich Park to ascertain the correctness of the theory of Robinson's anemometer; the point to be verified being that the scale of the instrument, founded on the supposition that the horizontal motion of the air is about three times the space described by the centers of the cups, is correct.

A post about 5 feet high with a vertical spindle in the top was erected, and on this spindle turned a horizontal arm, carrying at the extremity of its longer portion Robinson's anemometer, and on its shorter portion a counterpoise. The distance from the vertical spindle of the post to the vertical axis of the anemometer was $17^{ft.}\ 8^{in.}\cdot 7$. The reading of the dial was taken, and then the arm was made to revolve in the horizontal plane 50 or 100 times, an attendant counting the number of revolutions, and the reading of the dial was again taken. In this manner 1,000 revolutions were made in the direction N.E.S.W.N., and 1,000 revolutions in the direction N.W.S.E.N. In some of the experiments the air was sensibly quiet, and in others there was a little wind; the result was,

For a movement of the instrument through one mile,

Beam revolving N.E.S.W. (opposite to the direction of rotation of the Anemometer-cups)	1·15 was registered
Beam revolving N.W.S.E. (in the same direction as the Anemometer-cups)	0·97 was registered.

The results from rapid revolutions and from slow revolutions were sensibly the same.

This may be considered as confirming in a very high degree the accuracy of the theory.

§ 21. *Rain Gauges.*

The rain-gauge connected with Osler's anemometer is 50 feet 8 inches above the ground, and 205 feet 6 inches above the mean level of the sea. It exposes to the rain an area of 200 square inches (its horizontal dimensions being 10 by 20 inches).

The collected water passes through a tube into a vessel suspended in a frame by spiral springs, which lengthen as the water increases, until 0·24 of an inch is collected in the receiver; it then discharges itself by means of the following modification of the syphon. A copper tube, open at both ends, is fixed in the receiver, in a vertical position, with its end projecting below the bottom. Over the top of this tube a larger tube, closed at the top, is placed loosely. The smaller tube thus forms the longer leg, and the larger tube the shorter leg, of a syphon. The water, having risen to the top of the smaller tube, gradually falls through it into the uppermost portion of a tumbling bucket, fixed in a globe under the receiver. When full, the bucket falls over, throwing the water into a small pipe at the lower part of the globe; the water completely fills the bore of the pipe; its descent causes an imperfect vacuum in the globe, sufficient to cause a draught in the longer leg of the syphon, and the whole contents run off. After leaving the globe, the water is received in a pipe attached to the building, which carries it away. The springs then shorten and raise the receiver. The ascent and descent of the water-vessel move a radius-bar which carries a pencil; and this pencil makes a trace upon the paper carried by the sliding-board of the self-registering anemometer.

The scale of the printed paper was adjusted by repeatedly filling the water-vessel until it emptied itself, then weighing the water, and thus ascertaining its bulk, and dividing this bulk by the area of the surface of the rain receiver.

A second gauge, with an area 77 square inches nearly, is placed close to the preceding, the receiving surface of both being on the same horizontal plane.

A third gauge is placed on the roof of the Octagon room, at 38 feet 4½ inches above the ground, and 193 feet 2½ inches above the mean level of the sea. It is a simple cylinder gauge, 8 inches in diameter and about 50¼ inches in area. The height of the cylinder is 13½ inches; at the depth of 1 inch from the top within the cylinder is fixed a funnel (an inverted cone) of 6 inches perpendicular height; with the point of this funnel is connected a tube, $\frac{1}{5}$ of an inch in diameter, and 1½ inch in length; ¾ of an inch of this tube is slightly curved, and the remaining ¾ of an inch is bent upwards, terminating in an aperture of $\frac{1}{8}$ of an inch in diameter. By this arrangement, the last few drops of water remain in the bent part of the tube, and the water is some days evaporating. The upper part of the funnel or bore of the cone is connected with a brass ring, which has been turned in a lathe, and this is connected with a circular piece 6 inches in depth, which passes outside the cylinder, and rests in a water joint, attached to the inner cylinder, and extending all round.

A fourth gauge is placed on the top of the Library; it is a funnel, whose top has a diameter of 6 inches; its exposed area is 28¼ inches nearly. The receiving surface of the gauge is 22 feet 4 inches above the ground, and 177 feet 2 inches above the mean level of the sea.

A fifth gauge is planted on the roof of the Photographic Thermometer stand, 10 feet above the ground, and 164 feet 10 inches above the mean level of the sea. Its construction is the same as that of the third gauge.

A sixth gauge is a self-registering rain-gauge on Crosley's construction, made by Watkins and Hill. The surface exposed to the rain is 100 square inches. The collected water falls into a vibrating bucket, whose receiving concavity is entirely above the center of motion, and which is divided into two equal parts by a partition whose plane passes through the axis of motion. The pipe from the rain-receiver terminates immediately above the axis. Thus that part of the concavity which is highest is always in the position for receiving water from the pipe. When a certain quantity of water has fallen into it, it preponderates, and, falling, discharges its water into a cistern below; then the other part of the concavity receives the rain, and after a time preponderates. Thus the bucket is kept in a state of vibration. To its axis is attached an anchor with pallets, which acts upon a toothed wheel by a process exactly the reverse of that of a clock-escapement. This wheel communicates motion to a train of wheels, each of which carries a hand upon a dial-plate; and thus inches, tenths, and hundredths are registered. Sometimes, when the escapement has obviously failed, the water which has descended to the lower cistern has again been passed through the gauge, in order to enable an assistant to observe the indication of the dial-plates without fear of an imperfection in the machinery escaping notice. The gauge is placed on the ground, 21 feet South of the Magnetic Observatory, and 156 feet 6 inches above the mean level of the sea.

The seventh and eighth gauges are placed near together, about 16 feet south of the Magnetic Observatory, 5 inches above the ground, and 155 feet 3 inches above the mean level of the sea. They are similar in construction and area to No. 3. These cylinders are sunk about 8 inches in the ground.

All these gauges, except No. 7, are read at 22^h daily; in addition, Crosley's gauge and No. 8 are read daily at 9^h p.m., and No. 7 at the end of each month only, to check the summation of the daily readings of No. 8. All are read at midnight of the last day of each month.

Gauges Nos. 1, 2, 3, 5, 8 were made by Messrs. Negretti and Zambra; No. 4 by Troughton; No. 6 by Watkins and Hill; and No. 7 is an old gauge.

§ 22. *The Actinometer.*

The actinometer consists of a hollow cylinder of glass 7 inches in length, and 1·22 inch in diameter, united at one end to a tube similar to a thermometer tube, 7 inches in length, which is terminated at its upper end by a ball 1·1 inch in diameter, the upper part of which is drawn out to a point, and broken off, so as to leave the end open, merely stopped by wax, and covered by a brass cap. The other end of the cylinder is closed by a silver plated cap, cemented on it, and furnished with a screw of silver, with 16 threads to an inch, passing through a collar of waxed leather. The axis of this screw is perforated through its entire length, to allow the stem of a thermometer to pass through it, (the bulb of which is nearly central within the cylinder), for the purpose of determining the temperature of the inclosed liquid. This liquid is of a deep blue colour (ammonio-sulphate of copper). When the actinometer is used in observation, the ball at the top is left full of air, and, according to the position of the screw, the liquid mounts into the first-mentioned tube, and its elevation can be read off on an attached scale which is divided into 100 parts. The cylinder is enclosed in a chamber which is blackened on three sides, and is covered on the fourth side or front by plate glass, to defend the chamber from currents of air; this glass is removeable at pleasure.

The screw is used to diminish or increase the capacity of the cylindrical cistern, and thus to drive into the ball, which acts as a reservoir, all air out of the tube, and then to draw back from the reservoir such a quantity as shall leave the top of the liquid at the zero of the scale or elsewhere at pleasure, leaving no bubble of air in the cylinder, and no blebs of liquid in the tube.

For using the instrument a wooden table is prepared, with a moveable part, on which the instrument is placed, and on which it can very readily be exposed perpendicularly to the rays of the Sun; and where a screen can momentarily be placed so as to cut off all the rays of the Sun from the chamber of the instrument, and can be quickly withdrawn, so as fully to expose the cylindrical chamber to the Sun's radiation.

The method of observation is as follows:

The liquid being adjusted to zero of the scale by the screw, will mount into the stem, as soon as exposed to the Sun. It is allowed to do so for a minute or two, taking care, by the use of the screw, that it does not mount into the ball. When all is ready for observation, the liquid is drawn down to the zero of the scale, slowly and steadily, the thermometer is read for the temperature of the liquid, at the beginning of a minute the scale is read, and at the end of a minute it is read again: the screen is placed before the instrument: at the following 30^s the scale is read for the first shade-observation, and at one minute afterwards is again read for the second shade-observation; the instrument is then exposed to the Sun at the beginning of the next minute, and read as before: and so on successively.

A delicate blackened bulb thermometer for solar radiation has also been frequently read during each series of experiments, for collection of comparative observation of the two instruments.

It is found by experiment that the fluid is driven up the tube 100 divisions by one-tenth of a turn of the screw. One inch in length of the screw including 16 threads, the distance between two contiguous threads is therefore 0·0625 inch.

A fine piece of silk was carefully passed round the bottom of 18 threads; its length was found to be 25·2 inches. Therefore the circumference of the screw at the bottom of the thread was 1·4 inch and its diameter 0·445 inch nearly. The depth of the thread is fully 0·05 inch.

These measures will give the means of converting the observed readings of the liquid in the slender tube into actual expressions of the proportion to the general store of liquid in the cylindrical chamber.

§ 23. *Electrical Apparatus.*

The electrical apparatus consists of two parts, namely, the Moveable Apparatus, which is connected with a pole nearly 80 feet high planted 7 feet North and 2 feet East of the north-east angle of the north arm of the Magnetic Observatory (as extended in 1862); and the Fixed Apparatus, which is mounted in a projecting window in the ante-room of the Magnetic Observatory.

On the top of the pole is fixed a projecting cap, to which are fastened the ends of two iron rods, which terminate in a pit sunk in the ground, and are kept in tension by attached weights. These rods are to guide the moveable apparatus in its ascents and descents. Near the bottom of the pole is fixed a windlass; the rope upon which it acts passes over a pulley in the cap, and is used to raise the moveable apparatus, which when raised to the top is suspended on a hook.

The moveable apparatus consists of the following parts:—A plank in a nearly vertical position is attached to perforated iron bars, which slide upon the iron rods. On the upper part of this plank is a cubical box. The box incloses a stout pillar of glass, having a conical hollow in its lower part. In the bottom of the box there is a large hole through which a cone of copper passes into the conical hollow of the glass pillar. In a space below the box a gas-lamp is placed, by the flame of which the copper cone and the lower part of the glass pillar are kept in a state of warmth. A copper wire is fastened round the glass pillar; its end is carried to a similar glass pillar, warmed in the same manner, near the north-western turret of the Octagon room; by this wire, whose length is about 400 feet, the atmospheric electricity is collected. To this wire, near the box, is attached another copper wire now covered with gutta percha 0·1 inch in diameter, and about 73 feet long, at the end of which is a hook; a loaded brass lever connected with the fixed apparatus presses upon this hook, and thus keeps the wire in a state of tension, and at the same time establishes the electrical communication between the long horizontal wire and the fixed apparatus.

The fixed apparatus consists of these parts:—A glass bar, nearly 3 feet long, and thickest at its middle, is supported in a horizontal position, its ends being fixed in pieces of wood projecting downwards from the roof of the projecting window. Near to each end is placed a small gas-lamp, whose chimney encircles the glass, and whose heat keeps the glass in a state of warmth proper for insulation. A brass collar surrounds the center of the glass bar; it carries one brass rod, projecting vertically upwards through a hole in the roof of the window-recess, to which rod are attached a small metallic umbrella and the loaded lever above-mentioned; and it carries another rod projecting vertically downwards, to which is attached a horizontal brass tube in an East and West direction. On the North and South sides of this tube there project four horizontal rods, through the ends of which there pass vertical rods, which can be fixed by screws at any elevation; these are placed in connexion with the electrometers, which rest on the window seat.

The electrometers during the year 1865 consisted of a Double Gold Leaf Electrometer of the ordinary construction; two Volta's Electrometers, denoted by Nos. 1 and 2; a Henley's Electrometer; a Ronalds' Spark Measurer; a Dry-pile Apparatus; and a Galvanometer.

Volta 1 and Volta 2 are of the same construction; each is furnished with a pair of straws 2 Paris inches in length; those of the latter being much heavier than those of the former: each instrument is furnished with a graduated ivory scale, whose radius is

2 Paris inches, and it is graduated into half Paris lines. In the original construction of these instruments it was intended that each division of No. 2 should correspond to five of No. 1: the actual relation between them has not yet been determined by observations at the Royal Observatory. The straws are suspended by hooks of fine copper wire to the suspension-piece, and they are separated by an interval of half a line.

Henley's Electrometer is supported on the West end of the large horizontal tube by means of a vertical rod fixed in it. On each side of the upper part of this rod is affixed a semicircular plate of ivory, whose circumference is graduated; at the centers of these ivory plates two pieces of brass are fixed, which are drilled to receive fine steel pivots, carrying a brass axis, into which the index or pendulum is inserted; the pendulum terminates with a pith ball. The relation between the graduations of this instrument and those of the other electrometers has not been determined. This instrument has seldom been affected till Volta 2 has risen to above 100 divisions of its scale.

The spark measurer consists of a vertical sliding rod terminated by a brass ball, which ball can be brought into contact with one of the vertical rods before referred to, also terminating in a ball; and it can be moved from it or towards it by means of a lever, with a wooden handle. During the operation of separating the balls, an index runs along a graduated scale, and exhibits the distance between the balls, and this distance measures the length of the spark.

The electrometers and the spark measurer were originally constructed under the superintendence of Francis Ronalds, Esq., but have since received small alterations.

The dry-pile apparatus was made by Watkins and Hill; it is placed in connexion with the brass bar by a system of wires and brass rods. The indicator, which vibrates between the two poles, is a small piece of gold leaf. This instrument is very delicate, and it indicates at once the quality of the electricity. When the inclination of the gold leaf is such that it is directed towards the top of either pile, it remains there as long as the quantity of electricity continues the same or becomes greater: the position is sometimes expressed in the notes by the words "as far as possible." The angle which the gold leaf makes with the vertical at this time is about 40°.

The galvanometer was made by Gourjon of Paris, and consists of an astatic needle, composed of two large sewing needles, suspended by a split silk fibre, one of the needles of the pair vibrating within a ring formed by 2,400 coils of fine copper wire. The connexions of the two portions of wire forming these 2,400 coils are so arranged that it is possible to use a single system of 1,200 coils of single wire, or a system of 1,200 coils of double wire, or a system of 2,400 coils of single wire: in practice the last has always been used. A small ball communicating by a wire with one end of the coils is placed in contact at pleasure with the electric conductor, and a wire leading from the other end of the coil communicates with the earth. An adjustible circular card, graduated to degrees, is placed immediately below the upper needle; the numeration of its divisions proceeds in both directions from a zero. One of these directions is distinguished by the letter A, and the other by the letter B; and the nature of the indication represented by the deflection of the needle towards A or towards B will be ascertained from the following experiment. A voltaic battery being formed by means of a silver coin and a copper coin, having a piece of blotting paper moistened with saliva between them: when the copper touches the small ball, and the wire which usually communicates with the earth is made to touch the silver, the needle turns towards A; when the silver touches the small ball, and the wire is made to touch the copper, the needle turns towards B.

§ 24. *Explanation of the Tables of Meteorological Observations.*

The mean daily value of the difference between dew-point temperature and air-temperature is the difference between the two numbers in the sixth and seventh columns. The Greatest and Least are the greatest and least among the differences corresponding to the times of observation in the civil day, or they are found from the absolute maxima and minima, as determined by comparing the observations of the self-registering wet-bulb thermometers with those of the self-registering dry-bulb thermometers.

The difference between the mean temperature for the day and the mean for the same day of the year on an average of fifty years, is found by comparison with a table of results deduced by Mr. Glaisher from fifty years' observations, made at the Royal Observatory, ending 1863.

Little explanation of the results deduced from Osler's Anemometer appears to be necessary. It may be understood generally that the greatest pressure occurred in gusts of short duration.

Robinson's Anemometer is read off every day at 22^h (10^h A.M.) and the difference between consecutive readings is entered opposite to the civil day on which the first reading is taken.

The register of rain ends generally at 9^h P.M.; the amounts recorded at 10^h A.M. and at 9^h P.M. being added together to form the rain fall for the day. This applies to the Cylinder Rain-gauge partly sunk in the ground, described above as the "eighth." If, however, there appears to be any doubt as to the correctness of the results, reference is made to a Rain-gauge of similar construction and placed near to it, called above the "seventh."

For understanding the divisions of time under the heads of Electricity and Weather, the following remarks are necessary:—The day is divided by columns into two parts (from midnight to noon, and from noon to midnight), and each of these parts is roughly subdivided into two or three parts by colons (:). Thus, when there is a single colon in the first column, it denotes that the remarks before it apply (roughly) to the interval from midnight to 6 A.M., and those following it to the interval from 6 A.M. to noon. When there are two colons in the first column, it is to be understood that the twelve hours are divided into three nearly equal parts of four hours each. And similarly for the second column.

The following is the explanation of the notation employed for record of electrical observations, it being premised that the quality of the Electricity is always to be supposed positive when no indication of quality is given :—

g cur.	denotes	*galvanic currents*
m	...	*moderate*
N	...	*negative*
P	...	*positive*

s	denotes	*strong*
sp	...	*sparks*
v	...	*variable*
w	...	*weak*

The duplication of the letter denotes an intensity of the modification described thus, s s is very strong ; v v, very variable.

The Clouds and Weather are described generally by Howard's Nomenclature ; the figure denotes the proportion of sky covered by clouds, the whole sky being represented by 10. The notation is as follows :

a	denotes	*aurora borealis*
ci	...	*cirrus*
ci-cu	...	*cirro-cumulus*
ci-s	...	*cirro-stratus*
cu	...	*cumulus*
cu-s	...	*cumulo-stratus*
d	...	*dew*
h-d	...	*heavy dew*
f	...	*fog*
sl-f	...	*slight fog*
th-f	...	*thick fog*
fr	...	*frost*
glm	...	*gloom*
gt-glm	..	*great gloom*
h-fr	...	*hoar frost*
h	...	*haze*
hl	...	*hail*
so-ha	...	*solar halo*
l	...	*lightning*
li-cl	...	*light clouds*
lu-co	...	*lunar corona*
lu-ha	...	*lunar halo*
m	...	*meteor*
ms	...	*meteors*
n	...	*nimbus*

r	denotes	*rain*
th-r	...	*thin rain*
oc-r	...	*occasional rain*
fr-r	...	*frozen rain*
h-r	...	*heavy rain*
shs-r	...	*showers of rain*
c-r	...	*continued rain*
c-h-r	...	*continued heavy rain*
m-r	...	*misty rain*
fr-m-r	...	*frequent misty rain*
sl-r	...	*slight rain*
h-shs	...	*heavy showers*
fr-shs	...	*frequent showers*
fr-h-shs	...	*frequent heavy showers*
li-shs	...	*light showers*
oc-shs	...	*occasional showers*
oc-h-shs	...	*occasional heavy showers*
sq	...	*squall*
sqs	...	*squalls*
fr-sqs	...	*frequent squalls*
h-sqs	...	*heavy squalls*
fr-h-sqs	...	*frequent heavy squalls*
sc	...	*scud*
li-sc	...	*light scud*
sl	...	*sleet*

sn	denotes *snow*	th-cl	denotes *thin clouds*
oc-sn	... *occasional snow*	v	... *variable*
sl-sn	... *slight snow*	vv	... *very variable*
s	... *stratus*	w	... *wind*
t	... *thunder*	st-w	... *strong wind*
t-s	... *thunder storm*		

The foot-notes show the means and extremes of readings, and their departure in each month from average values, as found from the preceding Twenty-four Years Observations; those relating to Humidity have been calculated from the Third Edition of Glaisher's Hygrometrical Tables.

The observations with the Actinometer are sufficiently explained in the description of the instrument in § 22.

§ 25. *Observations of Luminous Meteors.*

In arranging for the observations of meteors, the directions circulated by the Committee of the British Association have received the most careful attention. The observers have been educated in the knowledge of the principal stars by observations of the stars themselves, and by means of globes and maps. The general instruction to all observers has been, to look out for meteors on every clear night; but the observer specially appointed for the evening's duties has been more particularly charged with this observation.

On the nights specially mentioned in the directions of the British Association Committee, greater attention was given to the sky, and the observations of meteors were made more systematically. These nights are, January 2 and 10; February 6; March 1; April 19; May 18; June 6 and 20; July 17, 20, and 29; August 3, August 7–13; September 10; October 1 and 23; November 9–14, November 19, 28, and 30; December 8–14, especially December 11.

Special arrangements were made in the August period for observing till the morning; and in the November period for observing through the night, one or two observers being on duty till midnight, and then all the observers till daybreak. The observers were so stationed as to command different views of the sky, to secure observation of all the meteors which might present themselves, and to guard against the observation of the same meteor by different observers.

The observers in the year 1865 were Mr. Nash, Mr. Harding, Mr. Trapaud, Mr. Jones, Mr. Wright, and Lieut. Rikatcheff of the Imperial Russian Navy. Their observations are distinguished by the initials N., A.H., F. T., E.J., T.W., and M.R., respectively.

§ 26. *Details of the Chemical Operations for the Photographic Records.*

Mr. Glaisher has drawn up the following account of the Chemical Processes employed in the Photographic Operations for the self-registration of the Magnetical and Meteorological Indications.

CHEMICAL PREPARATION AND TREATMENT OF THE PHOTOGRAPHIC PAPER FOR PRIMARIES.

The paper used is similar to that made by Whatman; it is made by his successor Hollingsworth; it is strong and of even texture, and is prepared expressly for Photographic purposes.

First Operation.—Preliminary Preparation of the Paper.

The chemical solutions used in this process are the following:—

(1.) Sixteen grains of Iodide of Potassium are dissolved in one ounce of distilled water.

(2.) Twenty-four grains of Bromide of Potassium are dissolved in one ounce of distilled water.

(3.) When the crystals are dissolved, the two solutions are mixed together, forming the iodising solution. The mixture will keep through any length of time. Immediately before use, it is filtered through filtering paper.

A quantity of the paper, sufficient for the consumption of several weeks, is treated in the following manner, sheet after sheet.

The sheet of paper is pinned by its four corners to a horizontal board. Upon the paper, a sufficient quantity (about 50 minims, or $\frac{5}{48}$ of an ounce troy) of the iodising solution is applied, by pouring it upon the paper in front of a glass rod, which is then moved to and fro till the whole surface is uniformly wetted by the solution. Or, the solution may be evenly distributed by means of a camel-hair brush.

The paper thus prepared is allowed to remain in a horizontal position for a few minutes, and is then hung up to dry in the air; when dry, it is placed in a drawer, and may be kept through any length of time.

Second Operation.—Rendering the Paper sensitive to the Action of Light.

A solution of Nitrate of Silver is prepared by dissolving 50 grains of crystallized Nitrate of Silver in one ounce of distilled water. Since the magnetic basement has been used for photography, 15 grains of Acetic Acid have always been added to the solution.

Then the following operation is performed in a room illuminated by yellow light.

The paper is pinned as before upon a board somewhat smaller than itself, and (by means of a glass rod, as before,) its surface is wetted with 50 minims of the Nitrate of Silver solution. It is allowed to remain a short time in a horizontal position, and, if any part of the paper still shines from the presence of a part of the solution unabsorbed into its texture, the superfluous fluid is taken off by the application of blotting paper.

The paper, still damp, is immediately placed upon the interior glass cylinder, and is covered by the exterior glass cylinder, and the united cylinders are mounted upon the revolving apparatus, to receive the spot of light formed by the mirror, which is carried by the magnet; or to receive the line of light passing through the thermometer tube.

Third Operation.—Development of the Photographic Trace.

When the paper is removed from the cylinder, it is placed as before upon a board, and a saturated solution of Gallic Acid, to which a few drops of Aceto-Nitrate of Silver are occasionally added, is spread over the paper by means of a glass rod, and this action is continued until the trace is fully developed. The solutions are kept in the magnetic basement, and are always used at the temperature of that room. When the trace is well developed, the paper is placed in a vessel with water, and repeatedly washed with several waters; a brush being passed lightly over both sides of the paper to remove any crystalline deposit.

Fourth Operation.—Fixing the Photographic Trace.

The Photograph is placed in a solution of Hyposulphite of Soda, made by dissolving four or five ounces of the Hyposulphite in a pint of water; it is plunged completely in the liquid, and allowed to remain from one to two hours, until the yellow tint of the Iodide of Silver is removed. After this the sheet is washed repeatedly with water, allowed to remain immersed in water for 24 hours, and afterwards placed within folds of cotton cloths till nearly dry. Finally it is placed between sheets of blotting-paper, and is pressed.

CHEMICAL PREPARATION AND TREATMENT OF THE PHOTOGRAPHIC PAPER FOR SECONDARIES.

Before taking a Secondary, the Primary is examined to ascertain whether the tint of the photographic curve is sufficiently dark. If it is not, the Primary is laid, face downwards, upon a desk of transparent plate-glass, below which is a large silvered plane mirror, so placed that the light from the sky is reflected upwards through the transparent glass and through the Primary; and the photographic curve is seen from the upper side or back with perfect distinctness. An assistant then darkens the back of the photographic curve by the application of sepia; the original photograph being untouched.

The paper used for the Secondaries is made by Rive; it is a strong wove paper, of tolerably even texture, thin, but able to bear a great deal of wear.

First Operation.—Preliminary Preparation of the Paper.

The chemical solution required for this purpose is as follows:—

Two grains of Chloride of Ammonium are dissolved in one ounce of distilled water. A sufficient quantity of this solution is placed in a flat-bottomed porcelain dish, and sheets of paper, one by one, are plunged within it; care being taken that no air bubbles remain between the paper and the solution; this may be prevented by slight pressure over the sheet by means of a bent glass rod. When a few sheets are thus immersed, they are turned over, and are taken out and hung to dry. Any number of sheets may thus be prepared.

An equally good result is obtained, by spreading over one side by means of a glass rod, as in the preparation of the Primaries, a solution of Chloride of Ammonium made by dissolving five grains of the chloride in one ounce of distilled water.

Second Operation.—Rendering the Paper sensitive to the Action of Light.

The solution required for this purpose is as follows:—

To a filtered solution of Nitrate of Silver (made by dissolving 50 grains of Crystallized Nitrate of Silver in one ounce of distilled water) some strong solution of Ammonia is added; the whole becomes at first of a dark brown colour, but when a sufficient quantity of Ammonia is added the solution becomes perfectly clear; a few crystals of Nitrate of Silver are then added till the solution is a little dull, forming "Ammoniacal Nitrate of Silver"; it is then ready for use.

The following operation is performed in a room illuminated by yellow light:—

By means of a glass rod this solution is spread over the paper, whilst pinned on a board; the paper is dried before a fire, and is then in a fit state to be used for producing a Secondary.

Third Operation.—Formation of the Photographic Copy.

A sheet of the paper so prepared is placed in a printing frame with its prepared side upwards, upon a bed of blotting paper resting upon a sheet of plate-glass; the Primary is then placed on the paper with its own face downwards; and as it is necessary, for obtaining a correct copy of the Primary, that it should be in close contact with the prepared surface, a second sheet of plate-glass is placed over it, and the two are pressed together by clamps and screws. The whole is then exposed to the light (the Primary to be copied being above the paper on which the copy is to be made). The time required to produce a copy depends, in a great measure, upon the thickness of the paper on which the Primary is made, and on the actinic quality of the light; a period of five minutes in a bright sunshine, or one hour in clear daylight, is generally sufficient.

Fourth Operation.—Fixing the Photographic Secondary.

When an impression has been thus obtained, it is necessary that the undecomposed Salts of Silver remaining in the paper be removed.

For this purpose the Secondary is at once plunged into water and well washed on both sides, passing a camel-hair brush over every part of it; it is then plunged into a solution of Hyposulphite of Soda (made by dissolving two or three ounces of the Hyposulphite in a pint of water), and is left through a period varying from half an hour to an hour. It is then removed, and washed in plain water several times; and running water is allowed to pass over it for twenty-four hours.

The sheets are then placed within the folds of drying cloths, till nearly dry, and finally between sheets of blotting paper.

The process of obtaining a Tertiary from a Secondary is in every respect the same as that of obtaining a Secondary from a Primary.

§ 27. *Personal Establishment.*

The personal establishment during the year 1865 has consisted of James Glaisher, Esq., F.R.S., Superintendent of the Magnetical and Meteorological Department, and Mr. William Carpenter Nash, Assistant.

Three or four computers have usually been attached to the Department.

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL OBSERVATIONS.

1865.

ROYAL OBSERVATORY, GREENWICH.

INDICATIONS

OF

MAGNETOMETERS.

1865.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	° ′ ″	h m		Jan. 1 h m		Jan. 1 h m	°	°
				0. 0	·03194	1. 0	55·4	56·0
				1. 55	·03190	Max.	55·6	59·0
				3. 59	·03209	7. 30	55·3	58·6
				6. 36	·03215	Min.	54·0	55·7
				11. 22	·03204	21. 0	54·5	56·0
				11. 30	·03210			
				11. 43	·03198			
				13. 26	·03200			
				18. 45	·03175			
				22. 8	·03150			
				23. 59	·03130			
				Jan. 2		Jan. 2		
				0. 0	·03130	1. 0	54·7	57·2
				0. 30	·03130	3. 0	54·2	56·8
					(†)	Min.	54·0	56·2
				1. 38	·03670	9. 0	54·4	57·0
				2. 57	{·03639	21. 0	55·1	58·0
					·03625	Max.	55·4	58·8
				9. 20	·03618			
				10. 30	·03615			
				11. 15	·03618			
				13. 15	·03615			
				14. 34	·03618			
				15. 50	·03615			
				19. 20	·03620			
				21. 10	·03628			
				22. 12	·03637			
				23. 45	·03642			
				23. 59	·03638			
				Jan. 3		Jan. 3		
				0. 0	·03638	1. 0	. .	59·2
				0. 17	·03642	3. 0	57·5	59·3
				0. 27	·03650	Max.	57·5	59·7
				1. 40	·03650	9. 0	56·6	59·1
				2. 9	·03646	Min.	55·3	57·9
				4. 0	·03667	21. 0	55·5	58·2
				6. 50	·03685			
				7. 1	·03680			
				7. 36	·03690			
				8. 0	·03685			
				9. 26	·03692			
				12. 7	·03675			
				14. 0	·03665			
				14. 46	·03657			
				20. 0	·03664			
				22. 0	·03665			
				23. 22	·03664			
				23. 59	·03665			
				Jan. 4		Jan. 4		
				0. 0	·03665	1. 0	. .	61·0
				0. 36	·03675	3. 0	59·6	61·8
				1. 8	·03694	Max.	60·3	61·9
				2. 0	·03710	9. 0	56·8	58·0
				2. 15	·03720	Min.	56·4	57·6
				2. 24	·03735	21. 0	56·8	58·7

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	° ′ ″	h m		Jan. 4 h m		h m	°	°
				2. 45	·03735			
				3. 18	·03745			
				4. 16	·03805			
				4. 45:	·03800			
				5. 37	·03830			
				5. 45	·03823			
				6. 22	·03825			
				6. 42	·03809			
				7. 36	·03785			
				8. 48	·03762			
				9. 30	·03755			
				10. 22	·03747			
				12. 3	·03743			
				13. 0	·03739			
				15. 9	·03735			
				16. 9	·03736			
				18. 35	·03725			
				19. 40	·03720			
				22. 46	·03724			
				23. 45	·03713			
				23. 59	·03715			
				Jan. 5		Jan. 5		
				0. 0	·03715	1. 0	56·7	58·9
				2. 30	·03722	3. 0	57·8	60·0
				5. 22	·03738	Max.	59·4	62·8
				6. 48	·03750	9. 0	58·4	62·0
				7. 52	·03764	Min.	56·6	57·8
				8. 42	·03784	21. 0	57·2	58·0
				9. 16	·03815			
				9. 30	·03805			
				9. 51	·03810			
				10. 6	·03800			
				10. 39	·03765			
				11. 4	·03774			
				11. 37	·03780			
				12. 18	·03765			
				12. 25	·03771			
				12. 51	·03735			
				14. 19	·03750			
				15. 15	·03745			
				15. 39	·03740			
				16. 37	·03748			
				17. 0	·03750			
				17. 35	·03763			
				18. 0	·03758			
				18. 39	·03750			
				19. 36	·03762			
				20. 25	·03763			
				22. 0	·03765			
				23. 45	·03755			
				23. 59	·03761			
				Jan. 6		Jan. 6		
				0. 0	·03761	1. 0	. .	58·2
				0. 50	·03782	3. 0	59·6	59·2
				1. 15	·03786	Max.	59·7	60·0
				1. 36	·03810	9. 0	57·4	57·4

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

January 2. Between 0^h. 30^m. and 1^h. 38^m., the Vertical Force Magnet was adjusted, and its time of vibration lengthened, and a new series began at 1^h. 38^m.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
				Jan. 6		Jan. 6		
h m	° ′ ″	h m		h m		h m	°	°
				2. 26	·03780	Min.	55·6	55·8
				3. 11	·03778 ·03795	21. 0	56·1	56·0
				5. 3	·03777			
				5. 33	·03780			
				6. 13	·03780			
				6. 39	·03790			
				7. 34	·03775			
				8. 30	·03770			
				9. 9	·03768			
				10. 9	·03763			
				10. 39	·03757			
				11. 30	·03747			
				11. 34	·03760			
				11. 52	·03735			
				12. 30	·03725			
				12. 48	·03711			
				13. 30	·03715			
				14. 7	·03704			
				14. 37	·03710			
				15. 9	·03700			
				15. 53	·03695			
				16. 45	·03701			
				17. 33	·03693			
				19. 0	·03685			
				20. 0	·03680			
				20. 45	·03677			
					***			
				23. 13	·03664			
				23. 42	·03650			
				23. 59	·03677			
				Jan. 7		Jan. 7		
				0. 0	·03677	1. 0	55·9	57·6
				0. 30	·03679	3. 0	56·5	58·2
				2. 28	·03685	Max.	57·8	60·2
				4. 56	·03690	9. 0	56·5	58·6
				5. 15	·03717	Min.	56·5	57·9
				5. 42	·03700	22. 10	56·8	58·0
				6. 54	·03711			
				8. 0	·03700			
				10. 36	·03670			
				11. 9	·03680			
				11. 35	·03670			
				12. 15	·03678			
				12. 37	·03672			
				12. 54	·03677			
				13. 20	·03662			
				14. 47	·03668			
				15. 30	·03664			
				18. 40	·03680			
				19. 38	·03675			
				21. 49	·03683			
				22. 26	·03690			
				22. 57	·03690			
					(†)			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
				Jan. 8		Jan. 8		
h m	° ′ ″	h m		h m		h m	°	°
					(†)	1. 0	57·0	58·0
				0. 32	·03687	Max.	58·2	60·3
				2. 5	·03695	8. 0	57·2	59·2
				2. 55	·03707	Min.	56·0	58·0
				3. 47	·03710	21. 6	56·9	59·1
				4. 0	·03716			
				5. 7	·03719			
				5. 24	·03712			
				5. 45	·03725			
				6. 15	·03716			
				7. 36	·03705			
				8. 40	·03703			
				12. 8	·03690			
				12. 52	·03687			
				13. 12	·03683			
				19. 48	·03695			
				20. 24	·03690			
				21. 26	·03710			
				22. 0	·03700			
				22. 54	·03705			
				23. 40	·03720			
				23. 59	·03736			
				Jan. 9		Jan. 9		
				0. 0	·03736	3. 0	58·4	61·9
				0. 20	·03728	Max.	59·6	62·0
				0. 30	·03745	9. 0	59·4	61·8
				0. 43	·03739	Min.	58·5	61·4
				1. 15	·03746	21. 0	59·6	62·0
				1. 37	·03762			
				2. 20	·03777			
				2. 23	·03769			
				2. 36	·03780			
				4. 0	·03810			
				4. 24	·03795			
				5. 20	·03797			
				5. 45	·03820			
				6. 36	·03830			
				6. 41	·03821			
				7. 10	·03830			
				7. 35	·03795			
				8. 6	·03805			
				10. 44	·03786			
				12. 24	·03792			
				12. 38	·03765			
				13. 21	·03737			
				13. 35	·03720			
				13. 49	·03735			
				14. 45	·03760			
				17. 55	·03765			
				19. 30	·03793			
				21. 28	·03800			
				22. 0	·03810			
				23. 59	·03796			
				Jan. 10		Jan. 10		
				0. 0	·03796	1. 0	..	57·5
				1. 24	·03805	3. 0	56·4	57·6

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

The suspension of the Declination Magnet until January 22, and that of the Horizontal Force Magnet until February 4, were of steel wire, with a very large co-efficient of torsion. The results given by the magnetometers during these periods have therefore been suppressed. From the dates above-mentioned, silk skeins were employed, as in former years.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	° ′ ″	h m		Jan. 10		Jan. 10		
				h m		h m	°	°
				2. 4	·03815	Max.	59·1	60·4
				2. 49	·03800	9. 0	58·6	59·4
				4. 52	·03825	Min.	57·4	58·4
				5. 54	·03815	21. 0	58·0	58·4
				6. 40	·03809			
				7. 14	·03818			
				8. 23	·03805			
				8. 35	·03811			
				9. 19	·03790			
				12. 0	·03795			
				12. 48	·03756			
				13. 26	·03770			
				13. 50	·03776			
				14. 7	·03760			
				14. 35	·03748			
				15. 39	·03761			
				16. 20	·03750			
				17. 6	·03766			
				18. 53	·03770			
				20. 15	·03760			
				21. 5	·03755			
				21. 37	·03749			
				23. 59	·03750			
				Jan. 11		Jan. 11		
				0. 0	·03750	1. 0	..	58·5
				1. 15	·03775	3. 0	58·8	59·0
				1. 50	·03790	Max.	59·5	59·8
				2. 24	·03775	9. 12	58·0	59·4
				3. 15	·03775	Min.	56·3	57·0
				3. 32	·03789	21. 0	57·0	57·5
				4. 0	·03780			
				4. 38	·03795			
				5. 9	·03775			
				5. 27	·03770			
				6. 24	·03784			
				8. 0	·03760			
				9. 57	·03750			
				10. 34	·03742			
				12. 44	·03738			
				13. 11	·03730			
				14. 38	·03725			
				15. 22	·03720			
				16. 25	·03725			
				18. 30	·03710			
				20. 30	·03690			
				22. 0	·03685			
				22. 32	·03682			
				23. 32	·03690			
				23. 59	·03700			
				Jan. 12		Jan. 12		
				0. 0	·03700	1. 0	58·0	58·6
				1. 6	·03715	3. 0	57·6	58·0
				1. 30	·03727	Min.	57·6	58·0
				2. 6	·03740	Max.	59·0	59·8
				2. 30	·03745	9. 0	57·1	59·0
				4. 33	·03726	Min.	56·8	59·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	° ′ ″	h m		Jan. 12				
				h m		h m	°	°
				5. 2	·03738	21. 0	57·5	59·0
				5. 34	·03725			
				6. 19	·03735			
				6. 33	·03730			
				6. 45	·03713			
				6. 55	·03715			
				7. 6	·03705			
				7. 22	·03710			
				7. 36	·03695			
				11. 25	·03692			
				12. 15	·03705			
				12. 40	·03685			
				14. 14	·03695			
				16. 35	·03680			
				19. 7	·03687			
				20. 10	·03680			
				21. 0	·03685			
				22. 22	·03685			
				22. 36	·03690			
				23. 14	·03680			
				23. 59	·03682			
				Jan. 13		Jan. 13		
				0. 0	·03682	1. 0	..	58·7
				2. 13	·03676	3. 0	58·8	60·5
				4. 7	·03705	Max.	59·7	60·6
				6. 0	·03700	9. 0	56·8	57·5
				7. 46	·03682	Min.	56·2	57·0
				8. 28	·03680	21. 0	56·8	58·2
				9. 19	·03657			
				10. 18	·03655			
				11. 24	·03664			
				11. 34	·03657			
				11. 43	·03660			
				12. 6	·03658			
				12. 25	·03660			
				12. 40	·03655			
				14. 46	·03668			
				16. 30	·03670			
				18. 27	·03665			
				19. 55	·03660			
				22. 30	·03650			
				23. 59	·03645			
				Jan. 14 ;		Jan. 14		
				0. 0	·03645	1. 0	57·8	59·1
				0. 11	·03650	Max.	58·0	60·0
				0. 45	·03655	9. 0	56·8	60·0
				1. 5	·03650	Min.	56·8	58·0
					(†)	22. 0	57·0	58·0
				2. 23	·03670			
				5. 24	·03681			
				7. 28	·03675			
				9. 39	·03670			
				10. 49	·03660			
				18. 50	·03660			
				19. 51	·03655			
				22. 17	·03660			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
				Jan. 14				
h m	° ′ ″	h m		h m		h m	°	°
				23. 28	·03658			
				23. 39	·03667			
				23. 59	·03660			
				Jan. 15		Jan. 15		
				0. 0	·03660	0. 30	57·1	59·0
				0. 23	·03670	Max.	57·2	59·9
				0. 35	·03665	8. 0	57·0	59·0
				0. 54	·03670	Min.	56·6	59·0
				0. 59	·03679	21. 0	56·9	59·0
				1. 22	·03672			
				1. 26	·03675			
				2. 18	·03710			
				2. 45	·03734			
				3. 8	·03738			
				3. 24	·03745			
				3. 34	·03742			
				3. 41	·03748			
				3. 56	·03755			
				4. 8	·03750			
				4. 35	·03773			
				4. 54	·03770			
				5. 15	·03785			
				5. 36	·03816			
				5. 46	·03810			
				6. 14	·03770			
				6. 30	·03750			
				6. 56	·03736			
				7. 11	·03730			
				7. 46	·03722			
				7. 58	·03715			
				8. 19	·03705			
				8. 35	·03714			
				9. 5	·03687			
				9. 27	·03695			
				9. 53	·03688			
				10. 24	·03679			
				10. 57	·03685			
				11. 7	·03675			
				11. 23	·03669			
				11. 54	·03683			
				12. 30	·03665			
				13. 6	·03658			
				13. 26	·03654			
				14. 40	·03650			
				15. 6	·03657			
				15. 30	·03661			
				15. 51	·03665			
				18. 4	·03660			
				18. 39	·03650			
				19. 52	·03656			
				20. 33	·03650			
				21. 56	·03648			
				22. 34	·03650			
				23. 52	·03660			
				23. 59	·03663			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
				Jan. 16		Jan. 16		
h m	° ′ ″	h m		h m		h m	°	
				0. 0	·03663	1. 0	56·8	59·0
				0. 51	·03670	3. 0	57·1	60·0
				1. 6	·03680	Max.	57·6	60·2
				1. 25	·03691	9. 0	57·6	60·2
				1. 37	·03685	Min.	54·3	54·5
				1. 53	·03697	21. 0	55·1	55·1
				4. 41	·03815			
				4. 55	·03840			
				5. 0	·03850			
				5. 18	·03836			
				5. 39	·03840			
				6. 30	·03804			
				6. 47	·03800			
				7. 30	·03788			
				7. 50	·03780			
				8. 23	·03767			
				8. 36	·03760			
				8. 45	·03745			
				9. 18	·03705			
				9. 40	·03700			
				9. 50	·03685			
				10. 11	·03633			
				10. 23	·03647			
				10. 38	·03630			
				10. 55	·03605			
				11. 9	·03600			
				11. 23	·03600			
				11. 33	·03567			
				11. 50	·03557			
				12. 39	·03537			
				12. 45	·03513			
				12. 54	·03487			
				13. 9	·03505			
				13. 20	·03530			
				13. 24	·03506			
				13. 38	·03495			
				14. 32	·03538			
				14. 50	·03530			
				15. 15	·03565			
				15. 26	·03585			
				15. 40	·03580			
				16. 50	·03586			
				17. 4	·03595			
				17. 49	·03584			
				18. 24	·03595			
				19. 23	·03585			
				21. 53	·03580			
				23. 34	·03585			
				23. 59	·03570			
				Jan. 17		Jan. 17		
				0. 0	·03570	1. 0	55·0	58·5
				1. 24	·03556	3. 0	55·4	58·2
				1. 41	·03560 ·03585	Max. 9. 0	55·7 55·5	58·5 57·9
				3. 7	·03600	Min.	54·7	56·8
				3. 53	·03607	21. 0	54·9	57·0
				4. 11	·03619			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	° ′ ″	h m		h m		h m	°	°
				Jan. 17				
				5.10	·03640			
				5.30	·03652			
				5.54	·03675			
				6.8	·03677			
				6.24	·03692			
				6.34	·03689			
				6.53	·03705			
				7.4	·03710			
				7.39	·03738			
				8.0	·03725			
				8.24	·03710			
				8.30	·03730			
				8.41	·03685			
				9.25	·03617			
				10.4	·03624			
				10.40	·03612			
				11.8	·03548			
				12.40	·03587			
				13.21	·03593			
				13.36	·03588			
				15.46	·03583			
				22.30	·03567			
				22.54	·03561			
				23.59	·03558			
				Jan. 18		Jan. 18		
				0.0	·03558	Min.	53·8	56·8
				1.50	·03565	1.0	53·9	57·0
				6.13	·03578	3.0	54·6	57·8
				10.8	·03570	Max.	55·3	58·4
				11.44	·03565	9.0	54·9	58·0
				21.45	·03565	Min.	54·9	57·4
				23.59	·03565	21.0	55·2	57·4
				Jan. 19		Jan. 19		
				0.0	·03565	1.0	55·8	58·4
				1.46	.03565	3.0	55·9	58·3
				2.44	·03575	Max.	56·3	59·2
				2.53	·03572	9.0	55·9	58·2
				3.40	·03595	Min.	55·4	58·2
				4.7	·03603	21.0	56·0	58·8
				4.15	·03596			
				6.0	·03605			
				8.1	·03593			
				10.24	·03585			
				12.44	·03584			
				13.9	·03536			
				13.27	·03545			
				13.53	·03542			
				14.21	·03555			
				14.45	·03570			
				16.49	·03575			
				17.21	·03570			
				20.11	·03568			
				21.27	·03560			
				21.54	·03554			
				23.15	·03565			
				23.59	·03568			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	° ′ ″	h m						
				Jan. 20		Jan. 20		
				h m		h m	°	°
				0.0	·03568	1.0	56·1	59·0
				2.15	·03564 ·03595	3.0	56·1	59·1
				7.26	·03597	Max.	56·6	59·7
				7.50	·03605	9.25	56·1	59·0
				10.22	·03590	Min.	53·8	56·0
				10.53	·03595	21.0	53·9	55·0
				11.23	·03573			
				12.45	·03585			
				13.40	·03580			
				14.42	·03570			
				15.11	·03559			
				15.30	·03552			
				16.30	·03565			
				17.0	·03572			
				19.40	·03560			
				21.0	·03554			
				21.44	·03551 ·03519			
				23.2	·03523			
				23.45	·03515			
				23.57	·03513 ·03552			
				23.59	·03542			
				Jan. 21		Jan. 21		
				0.0	·03542	1.0	53·9	56·0
				4.0	·03551	3.0	54·2	56·3
				5.14	·03545	Max.	54·2	56·9
				7.21	·03555	9.0	53·9	56·0
				10.37	·03540	Min.	53·5	56·0
				12.10	·03535	22.0	53·8	56·0
				15.19	·03525			
				17.44	·03515			
				18.11	·03509			
				20.11	·03500			
				21.45	·03495			
				22.46	·03492 ·03465			
				23.15	·03465			
				23.59	·03472			
Jan. 22				Jan. 22		Jan. 22		
0.0	20.34.40			0.0	·03472	1.0	53·8	56·6
0.29	34.55			2.6	·03500	Max.	54·3	57·7
0.48	34.20			3.0	·03515	9.30	53·9	57·0
1.44	35.30			4.0	·03505	Min.	53·5	56·5
1.55	34.55			5.54	·03516	21.0	53·9	57·0
2.3	35.45			6.22	·03509			
2.11	34.10			9.26	·03500			
	***			10.5	·03493			
2.49	32.45			11.23	·03486			
2.56	33.30			13.6	·03478			
3.4	33.0			13.53	·03485			
3.26:	35.30			14.26	·03460			
3.44	35.50			14.51	·03472			
4.27	34.10			15.23:	·03446			
4.57	35.0			17.0	·03465			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 22				Jan. 22				
h m	° ′ ″	h m		h m		h m	°	°
5. 10	20. 34. 30			19. 31	·03470			
5. 33	28. 0			20. 11	·03466			
5. 41	26. 35			23. 7	·03473			
6. 6	30. 5			23. 59	·03470			
6. 24	30. 30							
6. 35	31. 50							
6. 52	31. 30							
6. 59	31. 30							
7. 10	32. 35							
7. 26	31. 20							
8. 3	29. 50							
8. 53	29. 30							
9. 8	30. 20							
9. 24	29. 50							
9. 56	31. 30							
10. 23	28. 35							
10. 38	28. 30							
10. 47	30. 20							
12. 2	30. 30							
12. 29	31. 30							
12. 54	30. 30							
13. 14	29. 20							
13. 36	30. 0							
14. 1	33. 30							
14. 23	28. 30							
14. 48	33. 30							
15. 46	28. 55							
17. 8	31. 20							
17. 26	30. 50							
17. 57	31. 40							
18. 56	32. 15							
19. 8	32. 50							
19. 19	31. 40							
19. 38	32. 30							
21. 12	32. 20							
22. 52	34. 5							
23. 23	35. 10							
23. 38	34. 50							
23. 54	35. 50							
23. 59	35. 30							
Jan. 23				Jan. 23		Jan. 23		
0. 0	20. 35. 20			0. 0	·03470	1. 0	54·0	57·2
0. 18	35. 30			2. 30	·03480	3. 0	54·2	58·9
0. 39	36. 15			8. 8	·03486	9. 0	54·3	59·0
1. 38	36. 20			9. 21	·03480	Max.	54·6	59·0
3. 11	34. 25			12. 0	·03485	21. 0	54·6	58·0
3. 26	34. 20			12. 41	·03474			
3. 56	31. 25			15. 26	·03476			
4. 8	30. 35			16. 17	·03448			
4. 27	32. 30			17. 11	·03461			
5. 2	33. 30			23. 59	·03464			
6. 10	32. 50							
6. 36	33. 20							
6. 47	32. 30							
6. 56	30. 20							
7. 10	28. 20							
7. 19	28. 50							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 23								
h m	° ′ ″	h m		h m		h m	°	°
7. 28	20. 28. 20							
7. 46	27. 20							
8. 7	29. 45							
8. 19	30. 0							
8. 48	32. 20							
9. 23	31. 40							
11. 38	30. 40							
11. 47	34. 20							
12. 11	33. 30							
13. 47	32. 5							
14. 46	31. 0							
15. 12	33. 55							
15. 38	33. 40							
16. 13	29. 10							
16. 43	30. 50							
16. 56	30. 20							
17. 8	31. 35							
17. 41	32. 45							
19. 59	32. 30							
21. 31	32. 20							
22. 34	33. 35							
22. 57	33. 50							
23. 19	35. 5							
23. 59	36. 10							
Jan. 24				Jan. 24		Jan. 24		
0. 0	20. 36. 10			0. 0	·03464	1. 0	54·9	58·1
0. 25	35. 35			2. 2	·03470	3. 0	55·1	58·4
0. 31	34. 30			2. 26	·03480	Max.	55·3	58·9
0. 41	34. 50			2. 50	·03477	9. 0	54·9	58·4
0. 50	34. 5			5. 33	·03486	Min.	54·9	58·2
1. 58	34. 35			10. 38	·03513	21. 0	54·9	58·3
2. 23	36. 15			10. 51	·03516			
	***			11. 11	·03495			
3. 38	34. 10			12. 53	·03515			
4. 36	34. 30			14. 17	·03505			
4. 57	33. 35			14. 45	·03515			
6. 12	33. 5			15. 36	·03488			
6. 24	33. 50			16. 24	·03506			
6. 56	32. 55			18. 18	·03502			
7. 13	33. 10			19. 7	·03496			
7. 49	33. 5			23. 59	·03500			
8. 9	32. 20							
8. 21	32. 55							
8. 38	32. 45							
8. 49	33. 5							
9. 9	32. 0							
9. 27	31. 30							
9. 48	31. 35							
9. 59	32. 30							
10. 19	29. 35							
10. 39	31. 30							
10. 56	24. 35							
11. 10	24. 30							
11. 41	29. 20							
11. 56	28. 35							
12. 7	30. 20							
12. 37	31. 35							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan.24								
h m	° ′ ″	h m		h m		h m	°	°
13. 14	20. 31. 50							
13. 31	29. 40							
14. 10	28. 30							
14. 31	31. 25							
15. 24	25. 10							
15. 44	25. 30							
16. 17	30. 30							
16. 43	29. 55							
16. 54	31. 0							
17. 4	30. 0							
17. 57	31. 55							
18. 12	34. 0							
18. 34	34. 30							
19. 6	32. 55							
19. 14	33. 0							
19. 28	32. 20							
19. 57	33. 5							
20. 19	32. 50							
20. 47	33. 55							
20. 55	33. 30							
22. 35	38. 10							
22. 54	37. 35							
23. 8	37. 55							
23. 26	36. 25							
23. 59	39. 25							
Jan.25				Jan.25		Jan.25		
0. 0	20. 39. 25			0. 0	·03500	1. 0	54 ·9	58 ·0
0. 24	39. 30			0. 8	·03495	3. 0	54 ·8	59 ·0
0. 28	38. 20			0. 16	·03512	Max.	55 ·3	59 ·0
0. 49	39. 55			1. 50	·03513	9. 0	54 ·9	58 ·0
0. 53	39. 40			1. 59	·03527	Min.	54 ·8	58 ·0
1. 25	39. 15			2. 24	·03536	21. 0	55 ·0	58 ·0
1. 41	40. 5			3. 45	·03600			
1. 49	39. 0			4. 7	·03596			
1. 55	39. 30			4. 47	·03552			
2. 9	38. 35			5. 52	·03540			
2. 19	41. 0			6. 40	·03538			
2. 27	40. 30			7. 0	·03556			
2. 50	46. 55			7. 17	·03582			
	***			7. 30	·03586			
3. 9	46. 30			7. 39	·03607			
3. 23	45. 55			8. 0	·03596			
3. 30	47. 15			8. 11	·03578			
3. 56	35. 35			8. 23	·03583			
4. 6	37. 15			8. 49	·03570			
4. 11	36. 0			9. 24	·03580			
4. 41	39. 35			10. 38	·03534			
5. 13	35. 50			11. 5	·03540			
5. 34	35. 10			11. 30	·03530			
5. 54	35. 35			12. 11	·03536			
6. 8	35. 0			12. 40	·03497			
6. 24	34. 55			13. 21:	·03520			
6. 52	39. 5			13. 54	·03504			
7. 18	37. 25			15. 9	·03520			
7. 36	25. 55			15. 30	·03510			
7. 44	26. 5			16. 18	·03523			
7. 49	20. 0			16. 31	·03513			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan.25				Jan.25				
h m	° ′ ″	h m		h m		h m	°	°
8. 1	20. 21. 35			17. 0	·03520			
8. 8	20. 55			18. 54	·03510			
8. 24	22 30			20. 58	·03505			
8. 36	21. 55			22. 59	{·03490			
8. 55	24. 20				·03467			
9. 36	31. 50			23. 59	·03475			
9. 38	31. 20							
9. 56	33. 35							
10. 23	31. 20							
10. 35	26. 35							
10. 42	26. 45							
11. 7	32. 25							
11. 23	29. 10							
11. 44	29. 25							
12. 1	36. 25							
12. 9	38. 35							
12. 34	35. 20							
12. 38	31. 55							
	***							
13. 30	32. 0							
13. 36	29. 35							
13. 44	28. 20							
14. 1	30. 55							
14. 26	33. 20							
14. 36	32. 55							
14. 54	33. 50							
15. 2	34. 40							
15. 9	34. 10							
15. 23	32. 25							
15. 41	33. 55							
15. 56	33. 40							
16. 9:	34. 55							
16. 24	32. 0							
16. 55	33. 55							
17. 8	32. 50							
17. 41	33. 55							
18. 3	33. 0							
18. 26	33. 25							
18. 37	32. 55							
19. 23	33. 45							
19. 47	33. 25							
20. 25	34. 20							
20. 41	35. 25							
20. 53	37. 55							
21. 8	39. 40							
21. 36	37. 45							
21. 53	37. 30							
22. 5	38. 10							
22. 23	36. 20							
22. 41	37. 55							
22. 53	38. 0							
23. 8	34. 10							
23. 24	37. 25							
23. 33	37. 45							
23. 59	37. 25							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 26				Jan. 26		Jan. 26		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 37. 25			0. 0	·03475	1. 0	55 ·7	58 ·4
0. 58	38. 0			2. 11	·03518	3. 0	55 ·7	58 ·0
1. 23	37. 55			8. 8	·03517	Max.	55 ·7	59 ·0
1. 36	36. 0			9. 14	·03521	9. 0	55 ·5	59 ·0
2. 26	37. 0			11. 0	·03518	Min.	55 ·0	57 ·8
2. 30	38. 0			11. 24	·03505	21. 0	55 ·2	57 ·8
2. 40	36. 20			12. 9	·03500			
3. 12	34. 10			13. 30	·03505			
3. 55	35. 0			13. 49	·03495			
4. 9	36. 10			16. 35	·03496			
4. 53	34. 25			22. 10	·03483			
5. 40	34. 20			23. 59	·03495			
6. 1	32. 0							
6. 35	33. 25							
7. 24	34. 30							
7. 52	33. 50							
8. 19	33. 25							
8. 44	31. 30							
9. 12	31. 25							
9. 48	29. 10							
9. 54	30. 15							
10. 9	29. 55							
10. 39	32. 30							
10. 44	32. 50							
11. 9	35. 0							
11. 27	33. 5							
11. 38	35. 0							
11. 52	36. 0							
12. 3	33. 30							
12. 11	33. 35							
12. 43	32. 0							
13. 1	31. 45							
13. 26	33. 0							
13. 38	36. 20							
14. 13	32. 30							
14. 35	33. 25							
15. 9	32. 50							
15. 56	33. 0							
16. 39	33. 50							
20. 11	34. 30							
21. 45	34. 45							
22. 26	35. 20							
	(†)							
Jan. 27				Jan. 27		Jan. 27		
	(†)			0. 0	·03495	1. 0	..	58 ·4
1. 0	20. 34. 39*			1. 59	·03510	3. 0	55 ·1	58 ·8
3. 0	31. 28*			3. 44	·03520	Max.	55 ·8	59 ·2
3. 14	31. 20			4. 45	·03525	9. 0	55 ·1	57 ·0
3. 39	32. 25			5. 0	·03515	Min.	53 ·4	55 ·6
3. 56	32. 5			5. 38	·03520	21. 0	54 ·0	56 ·0
4. 10	32. 55			6. 39	·03511			
4. 36	30. 55			7. 42	·03505			
4. 39	30. 0			9. 53	·03495			
4. 58	29. 40			10. 11	·03490			
5. 13	26. 0			11. 40	·03487			
	***			12. 38	·03500			
6. 9	30. 25			13. 27:	·03470			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 27				Jan. 27				
h m	° ′ ″	h m		h m		h m	°	°
7. 39	20. 29. 55			14. 29	·03480			
8. 8	29. 10			16. 0	·03485			
8. 31	29. 25			16. 15	·03475			
8. 53	28. 35			19. 5	·03479			
	***			21. 29	·03455			
9. 40	29. 40				(†)			
10. 23	28. 35			23. 12	·03410			
10. 39	29. 30			23. 30	·03414			
11. 8	29. 50			23. 59	·03405			
11. 43	26. 55							
12. 22	25. 35							
12. 37	27. 25							
12. 45	28. 0							
12. 57	32. 40							
13. 38	28. 25							
14. 23	28. 35							
14. 38	29. 20							
15. 3	29. 30							
15. 13	30. 40							
15. 47	29. 45							
16. 9	30. 50							
16. 24	29. 30							
16. 41	29. 30							
16. 57	30. 20							
17. 32	29. 15							
19. 2	29. 10							
19. 56	30. 0							
20. 39	29. 0							
21. 36	29. 50							
	(†)							
Jan. 28				Jan. 28		Jan. 28		
	(†)			0. 0	·03405	1. 0	54 ·0	54 ·3
1. 0	20. 33. 51*			0. 50	·03400	3. 0	52 ·5	55 ·9
1. 39	33. 30			1. 11	·03425	Max.	55 ·0	56 ·2
2. 3	32. 50			3. 6	·03447	9. 0	53 ·4	55 ·0
2. 39	34. 20			6. 27	·03450	Min.	51 ·7	53 ·5
	(†)			6. 52	·03464	22. 30	52 ·2	53 ·8
2. 45	36. 10			7. 0	·03475			
2. 58	39. 35			7. 22	·03485			
3. 18	36. 35			7. 29	·03500			
3. 42	35. 20			7. 40	·03528			
	***			8. 16	·03538			
4. 27	38. 0			8. 51	·03500			
4. 53	34. 45			9. 32	·03496			
5. 39	32. 20			9. 52	·03465			
6. 24	33. 25			10. 23	·03461			
6. 49	35. 15			10. 37	·03450			
6. 58	34. 30			10. 46	·03470			
7. 8	35. 55			11. 7	·03447			
7. 46	23. 5			11. 21	·03425			
7. 56	17. 25			11. 34	·03423			
8. 33	27. 50			14. 15:	·03428			
8. 54	28. 25			16. 52	·03415			
9. 8	25. 55			17. 53	·03405			
9. 29	25. 50			18. 41	·03400			
9. 43	32. 0			19. 59	·03370			
10. 1	29. 25			23. 0	·03370			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 28				Jan. 28				
h m	° ′ ″	h m		h m		h m	°	°
10. 8	20. 31. 30			23. 18	·03376			
10. 12	31. 35			23. 59	·03365			
10. 24	32. 5							
10. 39	19. 30							
10. 53	19. 30							
11. 12	23. 25							
11. 26	27. 20							
11. 41	26. 30							
12. 26	26. 35							
12. 45	29. 25							
13. 4	30. 15							
14. 24	29. 0							
15. 8	30. 40							
15. 37	29. 50							
16. 41	30. 25							
17. 2	31. 15							
17. 40	30. 55							
18. 48	34. 40							
19. 53	34. 30							
20. 44	32. 55							
	***							
22. 13	33. 0							
23. 10	34. 25							
23. 53	36. 0							
23. 59	35. 20							
Jan. 29				Jan. 29		Jan. 29		
0. 0	20. 35. 20			0. 0	·03365	1. 0	51·9	53·5
0. 15	34. 55			0. 7	·03365	Max.	53·5	56·5
0. 35	32. 40				(†)	8. 0	52·6	56·2
1. 4	32. 40			1. 0	·03403*	Min.	52·2	55·4
2. 0	36. 5			8. 0	·03438*	21. 0	52·5	56·0
2. 41	34. 55			9. 32	·03432			
3. 4	35. 0			9. 44	·03430			
3. 15	34. 25				(†)			
3. 42	34. 25			12. 23	·03376			
4. 25	35. 30			12. 32	·03385			
4. 54	33. 30			13. 19	·03380			
5. 22	34. 20			13. 34	·03359			
5. 30	33. 25			14. 8	·03362			
5. 54	34. 5			14. 21	·03345			
6. 5	33. 30			15. 0	·03355			
6. 29	33. 50			15. 34	·03368			
7. 1	31. 45			16. 37	·03375			
7. 38	29. 40			18. 38:	·03377			
7. 53	30. 25			20. 50	·03365			
7. 56	30. 0			22. 49	·03370			
8. 12	30. 30			23. 59	·03365			
8. 30	28. 55							
8. 53	28. 20							
9. 14	25. 30							
9. 26	26. 45							
	***							
10. 1	27. 20							
10. 24	30. 5							
10. 37	30. 10							
10. 46	31. 30							
11. 8	27. 35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 29								
h m	° ′ ″	h m		h m		h m	°	°
11. 40	20. 23. 0							
11. 49	23. 45							
12. 0	22. 55							
12. 36:	27. 30							
12. 56	27. 30							
13. 10	31. 45							
13. 38	27. 25							
14. 7	31. 50							
14. 24	26. 30							
14. 53	28. 50							
15. 6	27. 55							
15. 54	29. 0							
16. 11	28. 45							
16. 44	30. 30							
19. 39	33. 5							
20. 7	35. 25							
20. 23	34. 55							
20. 39	33. 35							
20. 54	33. 0							
21. 1	31. 35							
21. 46	33. 55							
22. 25	33. 25							
22. 58	33. 20							
23. 4	34. 30							
23. 23	34. 50							
23. 47	33. 40							
23. 59	34. 20							
Jan. 30				Jan. 30		Jan. 30		
0. 0	20. 34. 20			0. 0	·03365	1. 0	52·4	57·0
0. 7	34. 35				(†)	3. 0	53·0	57·4
	(†)			1. 0	·03400	9. 0	53·9	58·0
1. 0	33. 18*			1. 21	·03405	21. 0	54·6	58·1
3. 24	32. 0			2. 20	·03421	Max.	55·0	58·1
4. 38	31. 30			7. 30	·03442			
4. 49	30. 25			9. 14	·03455			
5. 9	31. 0			10. 51	·03465			
5. 27	31. 5			16. 21	·03485			
5. 48	30. 25			18. 38	·03485			
6. 25	30. 50			19. 52	·03478			
7. 12	31. 0			20. 55	·03468			
7. 44	30. 30			21. 32	·03473			
8. 27	30. 25			22. 0	·03450			
9. 0	30. 0			22. 36	·03445			
9. 56	29. 30			22. 55	·03467			
	***				(†)			
18. 6	29. 15			23. 59	·03525			
18. 35	28. 45							
18. 40	29. 30							
18. 49	28. 30							
19. 48	29. 20							
	***							
20. 33	29. 25							
	***							
20. 39	30. 30							
	***							
20. 46	29. 55							
21. 36	32. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 30								
h m	° ′ ″	h m		h m		h m	°	°
21. 50	20. 31. 35							
21. 54	34. 30 ***							
22. 22	34. 0 ***							
22. 55	33. 10 (†)							
Jan. 31				Jan. 31		Jan. 31		
	(†)			0. 0	·03525	1. 0	55·8	59·0
1. 0	20. 34. 13*			0. 55:	·03520	3. 0	54·9	59·0
3. 0	32. 57*			4. 7	·03530	Min.	54·6	58·5
3. 12	30. 0			5. 52	·03547	9. 0	55·8	59·0
3. 34	31. 55			7. 46	·03554	21. 0	55·7	59·3
3. 55	30. 55			8. 57	·03528	Max.	56·4	59·6
4. 14	32. 30			9. 53	·03534			
4. 30	32. 0			11. 30	·03505			
4. 44	32. 30			13. 57	·03535			
4. 53	31. 25			16. 55	·03548			
5. 4	32. 30			20. 27	·03538			
6. 14	32. 0			21. 10	·03548			
6. 28	33. 20			21. 38	·03540			
6. 43	30. 55				(†)			
7. 9	30. 25							
7. 34	28. 30							
7. 55	27. 50							
8. 14	30. 25							
8. 24	26. 0							
8. 29	19. 30							
8. 39	23. 0							
8. 44	24. 30							
8. 55	19. 20							
9. 9	22. 25							
9. 26	19. 30							
9. 43	21. 35							
9. 52	23. 50							
9. 55	21. 0							
10. 2	26. 25							
10. 9	26. 5							
10. 26	31. 50							
10. 34	31. 50							
10. 42	34. 0							
10. 56	28. 45							
11. 1	28. 35							
11. 18	22. 35							
11. 33	21. 30							
12. 9	28. 5							
12. 57	27. 15							
13. 9	28. 10 ***							
13. 50	28. 10							
14. 3	27. 25							
14. 19	28. 15							
14. 28	27. 20							
14. 33	28. 0							
15. 30	28. 10 ***							
18. 8	29. 20							
21. 9	29. 35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 31								
h m	° ′ ″	h m		h m		h m	°	°
21. 48	20. 29. 30 (†)							
Feb. 1				Feb. 1		Feb. 1		
	(†)				(†)	Min.	55·2	57·5
1. 0	20. 28. 24*			4. 25	·03108	1. 0	55·2	..
3. 0	30. 31*			4. 39	·03100	3. 0	55·6	..
3. 34	24. 15			5. 51	·03030	9. 0	57·1	58·0
4. 5	24. 5			6. 23	·03010	21. 0	57·5	61·8
4. 19	16. 50			6. 38	·03002	Max.	58·2	61·8
4. 24	18. 25			7. 18	·03006			
4. 38	15. 30			8. 24	·02990			
4. 47	18. 0			9. 56	·02983			
4. 56	19. 45			11. 19	·02978			
5. 7	19. 30			12. 15	·02960			
5. 29	23. 55			13. 6	·02970			
5. 42	24. 0			15. 52	·02980			
5. 56	25. 35			20. 44	·02970			
6. 7	24. 55			21. 15	·02965			
6. 19	24. 35			21. 54	·02960			
6. 42	20. 25			23. 6	·02956			
7. 3	21. 30			23. 45	·02951			
7. 19	16. 10			23. 59	·02950			
7. 26	14. 35							
7. 35	14. 30							
7. 52	16. 40							
8. 3	16. 0							
8. 14	17. 50							
8. 35	18. 0							
8. 54	22. 25							
9. 24	22. 55							
9. 36	22. 10							
9. 44	23. 50							
10. 10	22. 30							
10. 23	21. 25							
11. 4	22. 10							
11. 23	19. 40							
11. 27	20. 5							
11. 34	19. 25							
11. 46	20. 30							
12. 2	18. 10							
12. 11	18. 10							
12. 23	17. 0							
12. 54	20. 30							
13. 46	22. 25							
14. 43	23. 30							
14. 52	22. 45							
14. 55	24. 0							
15. 8	23. 30 ***							
15. 31	24. 10							
17. 10	23. 55							
17. 23	23. 10							
17. 55	24. 30							
18. 8	23. 5							
19. 25	23. 40							
19. 39	23. 25							
20. 10	23. 55							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

February 1^d. 4^h.—VERTICAL FORCE.—The adjustments were altered, so that the readings were decreased by 6·80 divisions, or by 0·00355 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 1								
h m	° ′ ″	h m		h m		h m	°	°
20. 41	20. 24. 0							
20. 52	25. 5							
21. 0	23. 55							
	***							
21. 29	24. 55							
21. 54	26. 0							
22. 11	23. 50							
22. 53	24. 25							
22. 56	26. 35							
23. 12	26. 35							
23. 18	25. 25							
23. 59	27. 5							
Feb. 2				Feb. 2		Feb. 2		
0. 0	20. 27. 5			0. 0	·02950	Max.	..	61·5
0. 13	27. 0			1. 6	·02960	1. 0	..	60·0
0. 26	25. 55			2. 25	·02974	3. 0	..	59·0
0. 41	28. 25			2. 40	·02984	9. 0	..	58·1
	***			7. 23	·02970	Min.	..	56·4
1. 27	30. 0			7. 44	·02988	21. 0	..	57·0
	***			7. 48	·02982			
1. 54	30. 45			8. 13	·02994			
2. 23	29. 40			8. 45	·02975			
2. 34	31. 35			10. 29	·02968			
2. 47	29. 55			10. 45	·02960			
2. 56	30. 5			11. 5	·02960			
3. 15	26. 50			11. 45	·02923			
3. 39	26. 35			12. 57	·02940			
3. 59	28. 5			13. 44	·02920			
	***			16. 28	·02918			
6. 0	24. 35			19. 40	·02900			
6. 24	26. 5			20. 23	·02890			
6. 44	25. 10			21. 24	·02880			
7. 8	25. 20			21. 36	·02866			
7. 26	15. 35			22. 45	·02877			
7. 43	18. 50			23. 59	·02870			
7. 51	13. 0							
8. 3	3. 50							
8. 14	6. 5							
8. 26	9. 30							
9. 8	22. 45							
9. 25	21. 35							
9. 39	22. 40							
9. 54	22. 55							
10. 8	23. 0							
10. 18	24. 55							
10. 30	22. 0							
10. 49	16. 50							
11. 5	17. 30							
11. 26	22. 20							
11. 39	21. 35							
11. 54	16. 25							
12. 8	17. 20							
12. 11	17. 0							
12. 41	20. 0							
12. 53	22. 30							
13. 13	26. 35							
13. 23	29. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 2								
h m	° ′ ″	h m		h m		h m	°	°
13. 52	20. 22. 50							
14. 1	21. 45							
14. 7	20. 30							
14. 23	20. 0							
14. 35	20. 50							
14. 41	22. 5							
15. 16	22. 0							
15. 38	20. 45							
16. 8	20. 55							
16. 27	22. 30							
	***							
18. 14	22. 25							
18. 19	22. 35							
18. 27	23. 50							
	***							
20. 7	30. 15							
	***							
21. 48	27. 10							
21. 55	26. 20							
22. 2	27. 25							
22. 9	26. 55							
22. 23	28. 5							
22. 26	26. 30							
22. 45	27. 50							
23. 2	30. 0							
23. 10	29. 30							
	***							
23. 33	31. 35							
23. 59	30. 30							
Feb. 3				Feb. 3		Feb. 3		
0. 0	20. 30. 30			0. 0	·02870	1. 0	..	59·5
2. 56	27. 5			1. 23	·02880	3. 0	..	60·0
3. 1	26. 20			2. 25	·02872	Max.	..	60·2
3. 24	26. 50			2. 34	·02880	9. 0	..	60·0
3. 27	27. 30			3. 19	·02910	Min.	..	57·7
3. 36	26. 30			3. 28	·02920	21. 0	..	57·7
4. 4	26. 10			6. 57	·02919			
4. 34	27. 5			7. 36	·02932			
4. 41	26. 15			8. 27	·02920			
4. 50	26. 30			10. 32	·02925			
4. 54	25. 40			10. 53	·02910			
	***			13. 4	·02920			
5. 17	27. 0			15. 23	·02914			
6. 6	26. 20			17. 57	·02900			
6. 9	25. 30			18. 38	·02910			
	***			19. 19	·02860			
6. 31	24. 40			19. 56	·02870			
6. 56	15. 10			20. 15	·02860			
7. 25	21. 50			20. 46	·02870			
7. 38	23. 55			21. 7	·02887			
7. 56	25. 25			21. 45	·02882			
9. 23	25. 30				***			
10. 18	24. 40			23. 19	·02910			
10. 39	26. 50			23. 59	·02910			
10. 48	25. 55							
10. 57	26. 0							
11. 9	25. 20							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 3								
h m	° ′ ″	h m		h m		h m	°	°
11. 26	20. 25. 40							
11. 40	23. 45							
12. 6	24. 20							
12. 21	24. 5							
12. 39	23. 50							
12. 51	24. 40							
13. 40	24. 0							
13. 47	24. 45							
14. 16	24. 30							
14. 21	25. 0							
14. 46	24. 35							
15. 9	24. 30							
15. 21	25. 10							
15. 24	24. 45							
15. 51	24. 20							
16. 0	22. 30							
16. 7	23. 50							
16. 14	23. 25							
16. 23	23. 40							
16. 26	24. 55							
16. 29	23. 40							
	***							
17. 8	24. 20							
17. 40	22. 30							
17. 52	23. 40							
17. 54	22. 5							
18. 9	22. 55							
18. 24	30. 35							
18. 26	30. 30							
18. 43	45. 15							
18. 53	44. 25							
18. 56	45. 30							
	***							
19. 11	41. 45							
19. 23	38. 50							
19. 26	38. 50							
19. 38	42. 20							
19. 40	40. 50							
19. 54	44. 35							
20. 4	45. 0							
20. 10	41. 30							
20. 27	36. 20							
20. 39	33. 0							
20. 49	32. 25							
20. 54	34. 30							
21. 0	35. 0							
21. 4	37. 30							
21. 24	39. 45							
21. 31	38. 30							
	***							
21. 53	29. 15							
22. 8	31. 35							
	***							
22. 38	27. 30							
	***							
22. 56	27. 35							
23. 11	28. 0							
23. 23	29. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 3								
h m	° ′ ″	h m		h m		h m	°	°
23. 44	20. 30. 45							
23. 59	30. 40							
Feb. 4		Feb. 4		Feb. 4		Feb. 4		
0. 0	20. 30. 40		(†)	0. 0	·02910	1. 0	..	60·0
0. 25	31. 0	2. 40	·1194	1. 26	·02937	Max.	..	61·0
	***		***		(†)	3. 0	57·8	59·1
0. 49	34. 30	3. 41	·1207	2. 15	·03730	9. 0	56·9	59·0
0. 56	34. 20	3. 52	·1204	4. 11	·03728	Min.	55·3	56·5
1. 7	35. 55	3. 57	·1209	5. 54	·03748	22. 0	55·9	56·7
1. 23	30. 30	4. 23	·1204	6. 13	·03713			
1. 26	30. 30	5. 0	·1208	7. 24	·03730			
1. 39	27. 50	5. 22	·1198	8. 56	·03740			
2. 1	30. 25	5. 44	·1201	9. 9	·03720			
2. 23	30. 5	6. 12	·1211	9. 41	·03727			
3. 10	26. 30	6. 53	·1209	10. 45	·03687			
	***	7. 28	·1212	11. 30	·03686			
3. 53	26. 30	7. 52	·1210	12. 8	·03692			
4. 24	26. 10	8. 4	·1206	12. 55	·03670			
4. 55	26. 0	8. 27	·1198	13. 54	·03690			
5. 3	25. 30	8. 35	·1200	15. 28	·03688			
5. 16	23. 0	8. 41	·1197	16. 4	·03680			
5. 23	23. 30	9. 4	·1204	16. 54	·03640			
5. 39	22. 5	9. 13	·1201	19. 11	·03670			
5. 47	21. 55	9. 30	·1211	22. 28	·03672			
6. 2	24. 20	9. 40	·1207	22. 41	·03663			
6. 10	23. 10	9. 48	·1210	23. 59	·03665			
6. 34	24. 5	9. 56	·1208					
6. 45	23. 30	10. 11	·1224					
7. 4	24. 55	10. 28	·1215					
7. 10	24. 30	10. 40	·1239					
7. 26	25. 0	10. 48	·1240					
7. 54	24. 30	11. 12	·1218					
8. 6	23. 30	11. 19	·1219					
8. 23	21. 20	11. 40	·1193					
8. 31	22. 30	11. 58	·1205					
8. 41	20. 30	12. 7	·1203					
8. 54	20. 25	12. 44	·1213					
9. 12	11. 30	12. 57	·1207					
9. 39	17. 0	13. 29	·1206					
9. 51	24. 30	13. 49	·1209					
9. 54	24. 50	14. 7	·1206					
10. 0	23. 55	14. 26	·1208					
10. 8	24. 30	14. 41	·1204					
10. 23	17. 30	15. 18	·1208					
10. 35	10. 25	16. 27	·1222					
10. 51	14. 30	16. 44	·1229					
11. 0	15. 5	17. 4	·1224					
11. 9	12. 10	17. 24	·1231					
11. 26	14. 20	17. 40	·1220					
11. 39	13. 25	18. 11	·1213					
12. 1	20. 30	18. 22	·1216					
12. 15	24. 30	18. 28	·1212					
12. 38	22. 30	18. 40	·1216					
13. 3	21. 50	18. 49	·1215					
13. 25	22. 25	19. 18	·1226					
13. 49	24. 15	19. 26	·1218					
14. 17	23. 30	19. 47	·1216					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

February 4ᵈ. 2ʰ.—VERTICAL FORCE.—The adjustments were altered, so that the readings were increased by 15·85 divisions, or by 0·00828 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Feb. 4		Feb. 4						
h m	° ′ ″	h m		h m		h m	°	°
14.33	20.25.30	20.25	·1222					
14.39	24.55	20.40	·1217					
15. 0	26.20	22.12	·1215					
15.14	25.30	22.26	·1219					
15.23	26. 0	22.54	·1215					
15.38	25.30	23.46	·1218					
16. 7	28.10	23.59	·1213					
16.21	32.30							
16.27	33.20							
17. 6	25. 0							
17.25	24.20							
17.37	22.45							
17.46	22. 0							
18. 3	23.30							
18.23	22.45							
18.31	24. 0							
18.39	23. 0							
18.50	23.50							
19. 6	23.50							
19.12	25.30							
19.24	25.20							
19.27	24. 5							
19.55	23.45							
20.16	24.40							
20.26	26.45							
21. 8	24.50							
21.14	24. 0							
21.24	24.25							
21.36	25. 0							
21.44	24.45							
22.12	25.25							
22.34	28.20							
22.53	25.50							
23.34	28.35							
23.53	32. 5							
23.59	31.10							
Feb. 5		Feb. 5		Feb. 5		Feb. 5		
0. 0	20.31.10	0. 0	·1213	0. 0	·03665	Min.	55·8	56·9
0.14	31.40	0.20	·1215	1.36	·03672	1. 0	55·8	57·0
0.23	30.30		***	2.39	·03700	9. 0	56·0	58·3
0.39	29.45	1.18	·1199	2.45	·03710	21. 0	56·2	59·2
0.46	30.30	1.26	·1196	2.53	·03700	Max.	56·7	59·3
0.55	32.35	1.56	·1207	3. 3	·03710			
1. 2	31. 0	2. 0	·1203	3.16	·03770			
1.13	34.10	2.23	·1202	3.45	·03766			
1.23	33.30	2.30	·1209	4.24:	·03743			
1.42	34. 0	2.40	·1207	5. 4	·03740			
1.53	35.15	2.45	·1182	5.42	·03750			
1.56	34. 0	2.55	·1194	6.30	·03720			
2.22	33.40	2.57	·1184	6.46	·03726			
2.37	38. 0	3.12	·1201	8. 4	·03710			
2.41	27.35	3.23	·1185	9.26	·03690			
2.47	28.40	3.47	·1201	10. 3	·03685			
2.49	26. 0	4.11	·1208	10.53	·03670			
2.55	24.25	4.36	·1194	11. 6	·03680			
3. 7	31.30	4.44	·1198	12.39	·03684			
3. 9	30.25	5. 0	·1180	13.26	·03675			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Feb. 5		Feb. 5		Feb. 5				
h m	° ′ ″	h m		h m		h m	°	°
3.11	20.28.50	5.27	·1204	14.30	·03670			
3.24	26. 0	6. 8	·1211	15.41	·03680			
	***	6.24	·1197	16.39	·03667			
3.40	28.20	7.11	·1202	17.53	·03680			
	***	7.48	·1215	19. 6	·03670			
4. 6	30.10	8.13	·1212	23.47	·03685			
4.19	29.30	9.13	·1216	23.59	·03682			
4.24	30.25	9.36	·1210					
4.35	27.40	9.45	·1218					
4.41	27.30	10.14	·1225					
4.53	21.40	10.30	·1218					
5.16	11.55	10.55	·1209					
6. 2	20.50	11.14	·1215					
6.13	21. 0	11.28	·1217					
6.24	20.30	12. 7	·1209					
6.37	22.20	12.26	·1211					
6.39	24.25	12.42	·1218					
6.56	25. 0	13.43	·1210					
7. 3	25.30	14.12	·1217					
7.16	24.25	15.23	·1213					
7.36	23.25	15.58	·1205					
7.47	22.40	16.37	·1219					
7.55	22.50	17.13	·1212					
8. 3	21.30	17.53	·1220					
8.24	22. 0	18.11	·1221					
8.44	25. 5	18.44	·1227					
9.23	25.25	19.14	·1221					
9.34	24.10	20.13	·1222					
9.53	21. 5	20.25	·1218					
10. 2	22.20	20.45	·1220					
10.13	22.30	21.11	·1210					
10.26	23.15	22. 4	·1195					
10.39	22.40	22.28	·1198					
10.44	21.55	22.58	·1190					
10.55	22.50	23.48	·1201					
11. 6	24.10	23.59	·1205					
11.41	25.35							
11.55	25. 0							
12. 9	26.50							
12.16	25.55							
12.40	26. 0							
12.48	27. 5							
12.57	25.30							
13.39	25.35							
13.48	25. 0							
14. 0	26. 5							
	***							
14.34	24.10							
14.48	23.50							
15. 4	25.10							
15.23	25.45							
15.30	26.30							
15.46	29.55							
16. 0	29.55							
16. 8	29. 5							
16.38	25.30							
16.45	26.35							
	***							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 5								
h m	° ′ ″	h m		h m		h m	°	°
17. 8	20. 26. 30							
17. 13	26. 0							
17. 24	26. 35							
17. 41	25. 20							
17. 53	26. 0							
18. 8	25. 50							
18. 15	26. 45							
18. 43	25. 5							
19. 1	25. 30							
19. 9	24. 25							
19. 34	24. 0							
19. 45	25. 5							
19. 51	24. 55							
20. 11	26. 10							
20. 24	25. 5							
22. 12	28. 50							
	***							
22. 24	30. 15							
22. 36	30. 0							
22. 51	31. 45							
22. 54	31. 10							
23. 10	33. 10							
23. 34	30. 0							
23. 59	32. 30							
Feb. 6		Feb. 6		Feb. 6		Feb. 6		
0. 0	20. 32. 30	0. 0	·1205	0. 0	·03682	1. 0	56 ·1	59 ·0
0. 7	31. 25	0. 35	·1196	1. 29	·03700	3. 0	56 ·4	58 ·8
0. 23	29. 55	0. 52	·1202		***	Min.	55 ·7	58 ·4
	***	1. 43	·1206	2. 39	·03728	9. 0	56 ·8	59 ·0
0. 41	32. 30	2. 9	·1184	4. 7	·03710	21. 0	57 ·2	59 ·8
0. 52	32. 25	2. 40	·1212	4. 28	·03735	Max.	57 ·2	59 ·8
1. 1	31. 5	3. 11	·1215	5. 53	·03710			
1. 25	30. 25	3. 42	·1206	9. 14	·03700			
1. 31	29. 5	4. 3	·1180	10. 9	·03690			
1. 40	31. 0	4. 29	·1215	12. 40	·03690			
1. 57	30. 30	4. 50	·1213	13. 15	·03660			
2. 6	27. 30	5. 10	·1205	14. 50	·03680			
2. 10	26. 45	5. 23	·1212	15. 51	·03690			
	***	5. 41	·1206	18. 8	·03679			
2. 31	23. 35	5. 49	·1208	20. 50	·03684			
2. 52	26. 25	6. 2	·1205	22. 34	·03682			
3. 16	27. 0	6. 30	·1208	23. 59	·03690			
3. 35	29. 35	7. 4	·1202					
3. 41	29. 40	7. 13	·1209					
3. 52	30. 55	7. 25	·1204					
3. 58	17. 25	7. 30	·1206					
4. 11	15. 40	7. 46	·1203					
4. 23	19. 5	8. 12	·1206					
4. 38	22. 55	8. 16	·1204					
4. 41	22. 45	8. 57	·1214					
4. 53	24. 30	9. 11	·1212					
5. 1	23. 50	9. 40	·1229					
5. 21	26. 10	10. 25	·1212					
5. 34	26. 30	10. 36	·1214					
5. 39	25. 0	10. 46	·1209					
6. 18	25. 20	11. 12	·1205					
6. 38	23. 50	11. 41	·1209					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 6		Feb. 6						
h m	° ′ ″	h m		h m		h m	°	°
6. 47	20. 23. 50	11. 54	·1204					
6. 58	21. 55	12. 45	·1215					
7. 9	23. 25	13. 14	·1208					
7. 25	23. 50	13. 40	·1212					
7. 34	24. 5	13. 55	·1206					
7. 41:	22. 20	14. 6	·1209					
8. 8	24. 25	14. 54	·1206					
	***	15. 23	·1210					
8. 46	22. 35	16. 1	·1206					
9. 1	20. 55	16. 57	·1216					
9. 16	17. 0	17. 28	·1211					
9. 27	15. 5	17. 42	·1214					
9. 56	19. 15	18. 14	·1205					
10. 28	19. 30	19. 44	·1219					
11. 6	23. 20	21. 12	·1216					
11. 18	23. 0	21. 40	·1205					
11. 25	24. 20	21. 59	·1207					
11. 39	24. 25		(†)					
11. 47	22. 35							
12. 32	27. 25							
12. 39	27. 45							
12. 54	31. 5							
13. 0	31. 50							
13. 37	25. 30							
13. 47	26. 35							
14. 0	25. 0							
	***							
14. 36	25. 45							
14. 44	26. 30							
15. 0	25. 25							
	***							
15. 54	26. 25							
16. 3	27. 5							
16. 48	25. 30							
17. 11	26. 5							
17. 30	26. 0							
17. 38	27. 5							
	***							
17. 56	28. 25							
18. 17	28. 0							
18. 36	29. 5							
18. 41	28. 40							
19. 4	26. 55							
19. 11	27. 10							
19. 24	26. 55							
19. 33	27. 30							
19. 53	26. 35							
20. 3	27. 25							
20. 26	26. 30							
20. 46	26. 50							
21. 14	27. 25							
21. 43	27. 15							
21. 55	27. 30							
22. 11	28. 55							
22. 25	27. 5							
22. 39	29. 20							
	***							
23. 23	28. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 6								
h m	° ′ ″	h m		h m		h m	°	°
23. 47	20. 32. 25							
23. 59	32. 30							
Feb. 7		Feb. 7		Feb. 7		Feb. 7		
0. 0	20. 32. 30		(†)	0. 0	·03690	1. 0	..	61. 3
0. 10	34. 25	3. 37	·1294	0. 45	·03710	3. 0	..	61. 6
0. 24	34. 55	4. 7	·1297	2. 28	·03760	Max.	58 ·2	61. 8
0. 39	33. 25	4. 26	·1287	3. 8	·03758	9. 0	58 ·2	61. 8
0. 45	30. 30	4. 31	·1290	4. 24	·03780	Min.	57 ·8	59 ·0
1. 4	31. 50	4. 54	·1287	5. 0	·03790	21. 0	58 ·5	59 ·4
1. 53	29. 55	5. 15	·1298	5. 40	·03780			
2. 25	27. 0	5. 44	·1292	6. 9	·03790			
2. 53	27. 50	5. 56	·1294	6. 30	·03770			
2. 56	29. 0	6. 16	·1288	6. 49	·03800			
3. 9	27. 25	6. 30	·1272	7. 18	·03775			
	***	6. 44	·1306	8. 41	·03770			
4. 8	22. 55	6. 55	·1328	10. 40	·03775			
4. 23	20. 5	7. 6	·1315	11. 24	·03750			
	***	7. 13	·1309	13. 4	·03748			
5. 24	24. 40	7. 17	·1309	14. 22:	·03760			
5. 33	22. 50	7. 38	·1294	15. 6	·03750			
5. 48	22. 35	7. 48	·1292	17. 0:	·03770			
6. 6	22. 50	8. 0	·1298	18. 33	·03777			
6. 25	0. 10	8. 15	·1295	22. 24	·03760			
6. 39	9. 30	8. 28	·1298	23. 59	·03760			
6. 49	14. 25	9. 37	·1297					
7. 6	15. 55	9. 47	·1301					
7. 23	20. 35	10. 15	·1298					
7. 56:	24. 15	10. 22	·1303					
8. 55	24. 45	10. 49	·1325					
9. 25	23. 55	11. 10	·1313					
9. 34	22. 35	11. 15	·1313					
9. 45	22. 20	11. 17	·1309					
10. 5	18. 30	11. 26	·1313					
10. 10	17. 20	11. 40	·1303					
10. 26	17. 55	12. 8	·1306					
10. 38	15. 55	12. 34	·1298					
10. 55	18. 50	12. 46	·1302					
11. 8	15. 30	13. 3	·1292					
11. 29	20. 25	13. 16	·1295					
12. 7	21. 20	13. 25	·1291					
12. 13	20. 45	13. 34	·1291					
12. 24	22. 10	13. 43	·1294					
12. 55	22. 25	13. 52	·1288					
13. 12	23. 55	14. 0	·1290					
13. 38	24. 5	14. 5	·1288					
13. 46	25. 25	14. 16	·1287					
13. 55	24. 45	14. 52	·1301					
14. 12	30. 55	15. 0	·1296					
14. 23	32. 50	15. 15	·1300					
14. 25	32. 35	15. 19	·1298					
14. 33	31. 0	15. 53	·1301					
14. 39	29. 20	16. 1	·1297					
14. 52	28. 10	16. 11	·1300					
14. 55	25. 25	16. 15	·1296					
15. 8	25. 5	17. 43	·1305					
15. 19	23. 20		***					
15. 24	23. 20	19. 21	·1300					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 7		Feb. 7						
h m	° ′ ″	h m		h m		h m	°	°
15. 40	20. 22. 10	20. 15	·1305					
16. 3	23. 40	20. 25	·1302					
16. 7	24. 35	21. 47	·1302					
16. 19	23. 50	21. 55	·1295					
16. 34	24. 45	22. 1	·1302					
17. 9	24. 20	22. 12	·1299					
	***		***					
17. 59	25. 0	22. 57	·1300					
18. 6	24. 25	23. 5	·1305					
18. 25	25. 30	23. 18	·1300					
18. 46	24. 45	23. 59	·1292					
19. 14	25. 40							
19. 24	25. 0							
19. 45	25. 30							
19. 57	26. 0							
20. 11	25. 30							
20. 24	26. 35							
20. 36	25. 30							
20. 55	24. 50							
21. 39	26. 5							
22. 3	26. 50							
22. 15	26. 30							
	***							
22. 42	27. 45							
23. 1	26. 50							
23. 9	27. 35							
	***							
23. 39	28. 0							
23. 59	29. 5							
Feb. 8		Feb. 8		Feb. 8		Feb. 8		
0. 0	20. 29. 5	0. 0	·1292	0. 0	·03760	1. 0	58 ·2	59 ·2
0. 23	28. 0	0. 40	·1290	3. 25	·03770	3. 0	58 ·0	60 ·0
0. 46	27. 45	0. 50	·1294	4. 14	·03790	Max.	58 ·8	60 ·5
	(†)	1. 5	·1290	4. 57	·03788	10. 0	58 ·0	59 ·6
1. 0	26. 6*	1. 38	·1294	6. 0	·03780	Min.	56 ·0	57 ·5
3. 0	25. 12*	1. 59	·1293	8. 0	·03766	21. 0	56 ·8	57 ·5
3. 10	27. 55	2. 43	·1288	10. 31	·03765			
3. 23	26. 50	2. 48	·1290	11. 30	·03746			
3. 36	27. 30	3. 0	·1285	11. 49	·03752			
3. 58	26. 20	3. 8	·1287	12. 34	·03720			
4. 18	25. 45	3. 23	·1279	12. 54	·03716			
4. 23	25. 15	3. 30	·1286	13. 40	·03727			
4. 37	25. 0	3. 43	·1272	15. 3	·03720			
4. 53	26. 10	3. 58	·1268	17. 4	·03710			
5. 6	25. 30	4. 12	·1282	18. 25	·03700			
5. 17	23. 25	4. 24	·1280	21. 26	·03676			
5. 39	23. 0	4. 45	·1287	23. 9	·03627			
5. 48	22. 30	5. 12	·1280	23. 59	·03632			
6. 5	23. 15	5. 18	·1285					
6. 31	25. 55	5. 40	·1281					
6. 44	25. 10	5. 59	·1289					
7. 8	26. 25	6. 15	·1290					
8. 36	25. 30	6. 20	·1288					
8. 44	25. 45	6. 31	·1290					
8. 57	24. 50	6. 41	·1288					
9. 18	22. 55	6. 58	·1291					
9. 36	23. 45	7. 11	·1289					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

February 7. The Horizontal Force Magnet was under adjustment until $3^h. 37^m.$, and a new series commences at that time, which is quite distinct from the series ending February $6^d. 23^h. 59^m.$

February 8. From $1^h.$ to $3^h. 10^m.$ observations of the time of vibration of the Declination Magnet were made, with the Damper in different positions.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 8		Feb. 8						
h m	° ′ ″	h m		h m		h m	°	°
10. 23	20. 23. 10	7. 18	·1287					
10. 52	16. 20	7. 30	·1291					
10. 57	16. 50	7. 49	·1290					
11. 10	16. 30	7. 57	·1293					
11. 48	29. 0	8. 20	·1289					
12. 29	21. 30	8. 38	·1286					
12. 36	23. 30	8. 40	·1290					
12. 49	23. 0	8. 59	·1286					
13. 24	24. 15	9. 28	·1291					
13. 39	22. 35	10. 3	·1282					
13. 54	24. 10	10. 17	·1283					
14. 18	26. 55	10. 43	·1305					
14. 33	26. 20	11. 19	·1278					
14. 51	25. 35	11. 37	·1291					
15. 22	24. 50	12. 15	·1311					
16. 8	30. 30	12. 38	·1292					
16. 53	26. 30	12. 55	·1284					
17. 14	26. 35	13. 15	·1288					
17. 30	24. 30	13. 41	·1284					
18. 0	25. 5	14. 4	·1291					
18. 38	25. 10	14. 32	·1288					
18. 47	24. 25	15. 7	·1290					
19. 23	25. 0	15. 10	·1285					
19. 47	25. 5	15. 58	·1291					
20. 9	24. 35	17. 25	·1295					
20. 24	25. 55	17. 50	·1302					
20. 30	24. 30	18. 14	·1299					
21. 26	26. 30	18. 20	·1303					
22. 10	26. 35	18. 28	·1295					
23. 11	29. 30	18. 40	·1298					
23. 59	27. 30	19. 42	·1294					
		19. 48	·1290					
		20. 22	·1281					
		20. 43	·1284					
		21. 4	·1291					
		21. 22	·1289					
		21. 46	·1292					
		22. 22	·1288					
		22. 30	·1293					
		23. 59	·1286					
Feb. 9		Feb. 9		Feb. 9		Feb. 9		
0. 0	20. 27. 30	0. 0	·1286	0. 0	·03632	1. 0	56·3	58·4
1. 4	27. 30	0. 17	·1288	0. 30	·03640	3. 0	56·7	58·8
1. 38	27. 0	0. 48	·1290	2. 38	·03655	Max.	56·8	58·8
2. 7	25. 30	0. 57	·1289	5. 3	·03690	9. 0	56·1	57·6
2. 27	24. 45	1. 5	·1297	6. 26	·03672	Min.	54·9	56·4
2. 36	25. 30	1. 24	·1290	9. 5	·03665	21. 0	55·3	56·6
2. 57	23. 10	1. 37	·1298	10. 4	·03658			
3. 22	22. 0	1. 44	·1290	10. 30	·03660			
3. 40	20. 55	1. 52	·1297	11. 10	·03635			
3. 54	19. 0	1. 57	·1292	13. 30	·03645			
4. 9	17. 50	2. 6	·1296	20. 7	·03610			
4. 24	17. 30	2. 15	·1291	21. 9	·03600			
4. 46	19. 35	2. 38	·1292	21. 51	·03580			
5. 0	21. 30	2. 43	·1297	22. 44	·03570			
5. 23	21. 20	2. 51	·1289	23. 41	·03560			
5. 38	22. 25	3. 0	·1286	23. 59	·03570			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 9		Feb. 9						
h m	° ′ ″	h m		h m		h m	°	°
5. 56	20. 19. 45	3. 28	·1291					
6. 12	20. 30	3. 44	·1288					
6. 23	20. 30	3. 50	·1295					
6. 34	18. 25	3. 59	·1287					
6. 39	18. 25	4. 26	·1284					
6. 48	18. 55	5. 12	·1291					
6. 55	16. 30	5. 20	·1290					
7. 13	20. 10	5. 35	·1292					
7. 27	21. 30	5. 50	·1287					
7. 39	20. 35	6. 2	·1292					
8. 4	21. 0	6. 37	.1287					
8. 10	20. 30	7. 10	·1302					
8. 23	21. 5	7. 37	·1289					
8. 54	21. 0	7. 56	·1294					
9. 4	19. 30	8. 8	·1289					
9. 16	18. 40	8. 17	·1292					
9. 29	18. 30	8. 22	·1288					
9. 41	16. 20	8. 44	·1292					
9. 54	18. 25	9. 3	·1289					
10. 3	19. 30	9. 9	·1295					
10. 13	18. 25	9. 16	·1292					
10. 29	19. 5	9. 22	·1295					
10. 54	18. 30	9. 34	·1288					
11. 8	20. 0	9. 49	·1299					
11. 24	21. 10	10. 14	·1313					
11. 30	21. 10	10. 30	·1303					
11. 39	20. 25	10. 34	·1304					
11. 54	20. 25	10. 47	·1293					
12. 3	20. 0	11. 1	·1295					
12. 27	20. 20	11. 7	·1290					
13. 11	22. 30	11. 30	·1290					
13. 30	21. 25	11. 36	·1292					
13. 33	21. 45	11. 55	·1291					
14. 49	21. 30	12. 11	·1288					
15. 13	23. 0	12. 21	·1292					
16. 7	21. 25	12. 30	·1288					
	***	12. 46	·1292					
20. 41	21. 20	13. 10	·1288					
21. 10	22. 30	13. 20	·1290					
21. 56	22. 55	13. 28	·1287					
22. 45	24. 30	13. 40	·1292					
23. 29	25. 50	14. 2	·1288					
23. 37	25. 45	14. 19	·1293					
23. 43	26. 10	15. 18	·1290					
	(†)	16. 14	·1295					
		16. 32	·1293					
		16. 56	·1296					
		17. 13	·1292					
		19. 31	·1298					
		19. 50	·1295					
		20. 12	·1292					
		20. 19	·1293					
		20. 29	·1289					
		20. 40	·1293					
		20. 55	·1288					
		21. 13	·1290					
		21. 14	·1277					
		21. 34	·1279					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
		Feb. 9						
h m	° ′ ″	h m		h m		h m	°	°
		21. 46	·1282					
		21. 50	·1279					
		22. 20	·1278					
		22. 29	·1282					
		22. 38	·1279					
		23. 31	·1285					
		23. 56	·1285					
			(†)					
Feb. 10		Feb. 10		Feb. 10		Feb. 10		
	(†)	0. 0	·1300	0. 0	·03570	1. 0	55·2	57·1
1. 10	20. 35. 5	0. 10	·1303	0. 25	{ ·03580	3. 0	55·3	57·7
1. 41	34. 55	0. 26	·1301		·03548	Max.	55·6	57·9
2. 35	34. 0	1. 5	·1306	1. 45	{ ·03545	9. 0	55·5	57·0
3. 4	33. 30	1. 26	·1300		·03582	Min.	53·6	54·6
3. 18	33. 15	1. 34	·1303	3. 4	{ ·03600	21. 0	54·0	55·1
3. 27	33. 0	2. 32	·1304		·03608			
3. 54	33. 30	3. 7	·1299	5. 7	·03630			
4. 4	32. 50	3. 14	·1311	6. 9	·03620			
4. 12	32. 0	3. 42	·1309	9. 13	{ ·03612			
4. 24	31. 0	3. 48	·1312		·03594			
4. 39	29. 45	4. 12	·1309	9. 51	·03600			
5. 11	32. 30	4. 18	·1304	12. 56	·03580			
5. 51	32. 50	4. 34	·1309	15. 24	·03574			
5. 57	33. 5	4. 40	·1304	19. 0	·03550			
	***	4. 47	·1311	21. 0	·03535			
6. 23	30. 25	5. 22	·1312	22. 30	·03520			
6. 43	30. 0	5. 38	·1316	23. 38	·03500			
7. 4	31. 50	5. 47	·1316		(†)			
7. 33	32. 0	6. 21:	·1310					
7. 56	31. 30	6. 57	·1316					
10. 4	31. 45	7. 14	·1314					
10. 32	30. 5	8. 41	·1315					
10. 45	31. 15	8. 55	·1312					
11. 13	30. 20	8. 59	·1301					
11. 25	31. 0	9. 27	·1304					
11. 36	30. 55	10. 3	·1301					
12. 54	32. 0	10. 10	·1304					
13. 14	33. 5	10. 17	·1303					
14. 40	33. 0	10. 25	·1306					
15. 23	32. 40	10. 36	·1300					
15. 48	32. 30	10. 44	·1304					
16. 14	34. 5	10. 53	·1301					
16. 48	33. 30	11. 5	·1304					
17. 22	32. 35	11. 11	·1300					
17. 34	32. 35	13. 1	·1300					
18. 9	31. 30	13. 9	·1304					
19. 9	31. 30	13. 40	·1301					
19. 53	31. 30	14. 57	·1305					
19. 57	30. 45	15. 54	·1301					
20. 8	31. 30	16. 30	·1307					
20. 47	31. 25	17. 10	·1305					
22. 9	32. 50	17. 48	·1308					
22. 25	32. 45	18. 31	·1305					
22. 45	33. 30		***					
23. 0	34. 50	19. 58	·1307					
23. 15	36. 5	20. 38	·1304					
23. 24	36. 25	21. 4	·1304					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Feb. 10		Feb. 10						
h m	° ′ ″	h m		h m		h m	°	°
23. 36	20. 35. 50	23. 0	·1300					
23. 47	36. 40	23. 3	·1305					
23. 55	37. 20	23. 14	·1301					
23. 59	38. 5	23. 20	·1307					
		23. 27	·1299					
		23. 59	·1307					
Feb. 11		Feb. 11		Feb. 11		Feb. 11		
0. 0	20. 38. 5	0. 0	·1307		(†)	1. 0	53·8	55·2
0. 23	36. 55	0. 34	·1301	0. 19	·03510	Min.	53·0	53·4
0. 41	36. 15	1. 28	·1308	2. 26	·03510	3. 0	53·6	53·4
1. 9	38. 0	1. 43	·1304	11. 40	·03523	Max.	53·9	56·0
1. 39	35. 55	2. 16	·1310	16. 10	·03510	9. 0	53·9	55·3
2. 38	35. 10	2. 34	·1307	19. 3	·03490	Min.	52·5	53·8
3. 8	34. 30	2. 49	·1309	22. 9	·03480	22. 14	53·5	54·0
3. 47	33. 25	3. 6	·1305	23. 14	·03472			
3. 55	33. 0	3. 10	·1315	23. 59	·03480			
6. 23	32. 0	3. 27	·1314					
8. 53	31. 15	3. 36	·1317					
9. 37	31. 40	3. 44	·1315					
10. 30	31. 30	3. 49	·1318					
10. 53	30. 0	3. 56	·1314					
11. 6	30. 35	4. 6	·1319					
11. 18	30. 20	4. 21	·1314					
11. 53	31. 45	5. 40	·1314					
12. 34	32. 50	5. 51	·1316					
13. 1	32. 25	6. 49	·1316					
14. 4	32. 35	7. 22	·1313					
14. 44	32. 15	8. 4	·1314					
15. 31	32. 30	8. 41	·1313					
15. 53	31. 55	9. 0	·1315					
16. 10	32. 25	9. 30	·1312					
16. 26	31. 30	9. 56	·1314					
16. 53	31. 20	10. 14	·1311					
17. 18	32. 10	10. 35	·1311					
18. 12	31. 45	11. 0	·1318					
18. 57	32. 10	11. 15	·1314					
19. 30	32. 5	11. 59	·1312					
20. 16	31. 50	12. 13	·1318					
20. 52	31. 35	13. 6	·1313					
21. 8	32. 25	13. 24	·1316					
21. 19	31. 50	14. 0	·1315					
21. 27	32. 15	16. 11	·1318					
21. 38	31. 45	16. 50	·1316					
21. 46	32. 35	17. 22	·1319					
21. 57	31. 55	17. 40	·1315					
22. 37	34. 5	18. 4	·1319					
22. 42	34. 0	19. 19	·1319					
22. 51	34. 55	20. 18	·1316					
22. 55	34. 30	21. 34	·1309					
23. 11	35. 10	22. 10	·1312					
23. 30	36. 15	22. 36	·1307					
23. 51	35. 35	22. 50	·1311					
23. 59	36. 5	23. 5	·1308					
		23. 29	·1310					
		23. 43	·1308					
		23. 59	·1311					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

February 10. Between 0^h. and 1^h. 10^m. the time of vibration of the Declination Magnet, with the Damper in different positions, was determined.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 12		Feb. 12		Feb. 12		Feb. 12		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 36. 5	0. 0	·1311	0. 0	·03480	1. 0	53·6	54·2
0. 23	37. 20	0. 7	·1314	3. 4	·03510	Max.	54·0	55·9
0. 34	36. 50	2. 13	·1311	15. 0	·03484	8. 40	53·9	55·0
0. 53	36. 45	2. 45	·1313	16. 5	·03480	Min.	51·4	52·0
1. 19	37. 40	3. 0	·1310	17. 40	·03470	21. 10	52·0	52·5
2. 21	35. 35		***	19. 39	·03460			
2. 40	34. 50	4. 53	·1317	21. 55	·03450			
3. 16	33. 40	8. 49	·1317	23. 20	·03410			
4. 39	31. 55	10. 21	·1315	23. 59	·03395			
4. 54	32. 35	18. 40	·1321					
5. 10	32. 15	21. 55	·1312					
5. 53	31. 55	23. 59	·1312					
6. 9	31. 30							
6. 35	31. 45							
7. 23	31. 25							
8. 18	31. 35							
8. 34	30. 45							
8. 53	31. 30							
9. 4	31. 35							
9. 15	30. 45							
13. 58	31. 35							
14. 13	31. 35							
15. 9	32. 30							
15. 34:	31. 40							
16. 19	32. 30							
16. 39	31. 30							
17. 4	30. 55							
17. 39	31. 0							
17. 56	31. 35							
19. 54	31. 10							
20. 35	30. 30							
22. 8	31. 10							
23. 59	35. 20							
Feb. 13		Feb. 13		Feb. 13		Feb. 13		
0. 0	20. 35. 20	0. 0	·1312	0. 0	·03395	Min.	51·5	54·0
0. 10	35. 0	1. 40	·1319	1. 35	·03428	1. 0	51·7	54·8
0. 44	35. 55	4. 12	·1315	2. 14	·03442	3. 0	53·0	55·8
1. 36	36. 5	7. 31	·1317	4. 23	·03450	9. 0	53·1	55·9
2. 9	34. 15	10. 4	·1315	8. 10	·03460	21. 0	54·2	57·0
3. 51	31. 50		***	10. 24	·03470	Max.	54·6	58·0
4. 18	31. 45	13. 52	·1316	11. 56	·03490			
5. 18	31. 25	14. 10	·1319	15. 30	·03510			
5. 48	31. 50	19. 38	·1321	17. 53	·03530			
6. 10	31. 45	20. 57	·1318	19. 36	·03530			
6. 39	31. 30	22. 11	·1320	21. 35	·03540			
6. 53	30. 55	23. 59	·1313	22. 53	·03512			
10. 34	31. 0			23. 27	·03500			
10. 39	30. 35			23. 59	·03506			
10. 55	31. 0							
11. 16	30. 40							
11. 30	31. 0							
16. 28	32. 0							
18. 9	31. 25							
19. 56	32. 5							
21. 39	31. 50							
22. 51	32. 25							
23. 59	35. 35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 14		Feb. 14		Feb. 14		Feb. 14		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 35. 35	0. 0	·1313	0. 0	·03506	1. 0	54·1	55·8
0. 26	36. 30	1. 43	·1319	2. 53	·03534	3. 0	54·1	56·9
1. 18	36. 25	2. 30	·1317	6. 39	·03520	Max.	54·6	57·1
1. 26	35. 30	2. 43	·1321	8. 38	·03530	9. 0	54·0	56·2
1. 41	35. 25	3. 0	·1319	11. 38	·03520	Min.	51·8	53·3
1. 51	34. 50	3. 9	·1323	13. 36	·03500	21. 0	52·8	54·0
2. 27	34. 0	3. 14	·1319	14. 26	·03510			
2. 34	34. 30	3. 22	·1322	17. 6	·03515			
	***	3. 30	·1318	19. 58	·03500			
3. 23	33. 15	3. 57	·1319	21. 26	·03470			
3. 45	32. 40	4. 8	·1317	22. 56	·03450			
3. 55	32. 5	4. 26	·1317	23. 59	·03450			
	***	4. 42	·1322					
4. 43	32. 45	4. 54	·1320					
5. 8	33. 15	5. 1	·1323					
5. 39	32. 30	5. 25	·1325					
6. 12	33. 25	5. 52	·1319					
6. 31	32. 10	6. 3	·1321					
6. 48	33. 15	6. 41	·1309					
7. 8	32. 0	7. 33	·1310					
7. 41	32. 50	7. 51	·1308					
7. 56	32. 30	8. 6	·1309					
8. 12	33. 5	8. 22	·1305					
8. 24	32. 0	9. 39	·1313					
9. 0	30. 30	10. 6	·1311					
9. 25	30. 0	10. 31	·1316					
9. 40	30. 50	11. 19	·1311					
10. 41	30. 30	11. 34	·1313					
10. 56	31. 0	11. 55	·1312					
11. 53	30. 25	12. 10	·1317					
12. 38	32. 50	12. 26	·1317					
13. 7	29. 10	12. 39	·1314					
13. 22	33. 30	12. 55	·1323					
13. 39	32. 0	13. 11	·1319					
14. 4	28. 25	13. 31	·1321					
14. 23	28. 25	14. 14:	·1310					
14. 51	31. 30	14. 54	·1314					
15. 9	30. 0	15. 32	·1309					
15. 26	28. 20	16. 6	·1315					
15. 55	29. 45	16. 21	·1312					
16. 27	28. 50	16. 38	·1318					
16. 37	26. 55	16. 59	·1313					
16. 48	27. 35	19. 44	·1321					
16. 54	27. 0	20. 42	·1315					
17. 31	30. 0	22. 35	·1312					
18. 14	29. 50	22. 42	·1318					
18. 31	28. 55	23. 7	·1319					
18. 56	30. 5	23. 15	·1315					
19. 11	29. 25	23. 27	·1323					
19. 41	29. 40	23. 41	·1317					
19. 55	30. 45	23. 52	·1319					
20. 8	30. 45		(†)					
20. 23	31. 35							
20. 56	31. 10							
21. 30	31. 40							
	***							
22. 35	32. 55							
23. 9	35. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 14								
h m	° ′ ″	h m		h m		h m	°	°
23. 21	20. 35. 30							
23. 30	39. 0							
23. 54	39. 25							
23. 59	38. 25							
Feb. 15		Feb. 15		Feb. 15		Feb. 15		
0. 0	20. 38. 25		(†)	0. 0	·03450	1. 0	52·9	55·9
0. 14	36. 35	0. 15	·1315	0. 40	·03460	3. 0	53·0	56·3
0. 48	40. 5	0. 32	·1313	2. 0	·03480	Max.	53·8	57·4
0. 56	39. 0	0. 48	·1317	2. 40	·03490	9. 0	53·8	57·0
1. 4	38. 15	0. 56	·1316	4. 26	·03510	Min.	53·1	54·0
1. 26	41. 50	1. 6	·1320	5. 19	·03520	21. 0	53·8	54·0
1. 53	41. 25	1. 19	·1313	5. 50	·03528			
2. 11	42. 30	1. 22	·1316	6. 46	·03583			
2. 30	40. 10	2. 3	·1322	7. 41	·03574			
2. 54	39. 35	2. 8	·1319	8. 25	·03592			
3. 11	41. 0	2. 17	·1323	8. 57	·03550			
3. 25	40. 20	2. 55	·1313	9. 21	·03552			
3. 43	40. 30	3. 12	·1316	9. 40	·03540			
3. 53	39. 25	3. 39	·1318	11. 23	·03536			
4. 9	40. 10	3. 50	·1321	12. 38	·03500			
4. 27	40. 35	4. 6	·1318	13. 42:	·03490			
4. 41	42. 30	4. 23	·1320	14. 24	·03420			
4. 56	41. 35	4. 39	·1316	14. 56	·03420			
5. 9	42. 30	4. 50	·1318	16. 25:	·03470			
5. 26	41. 25	5. 5	·1314	17. 45	·03480			
5. 54	40. 0	5. 9	·1315	18. 6	·03470			
6. 21	32. 35	5. 23	·1307	20. 0	·03487			
6. 34	30. 0	5. 45	·1313	20. 44	·03482			
6. 42	32. 5	5. 53	·1308	23. 28	·03460			
6. 55	33. 0	6. 0	·1310	23. 59	·03460			
7. 6	34. 0	6. 6	·1305					
7. 11	32. 0	6. 15	·1306					
7. 28	36. 10	6. 40	·1288					
7. 38	35. 25	6. 47	·1295					
7. 53	38. 30	6. 51	·1293					
8. 6	37. 25	6. 55	·1298					
8. 19	34. 0	7. 8	·1293					
8. 50	8. 30	7. 22	·1303					
9. 7	13. 25	7. 34	·1295					
9. 23	13. 55	7. 42	·1299					
9. 53	22. 35	7. 55	·1285					
10. 1	22. 30	8. 4	·1281					
10. 23	23. 55	8. 15	·1284					
10. 26	23. 30	8. 24	·1282					
10. 40	24. 10	8. 50	·1300					
10. 49	23. 0	9. 4	·1275					
11. 9	23. 5	9. 17	·1270					
11. 21	21. 0	9. 29	·1279					
11. 33	23. 30	9. 42	·1273					
11. 41	25. 5	9. 45	·1274					
12. 1	28. 55	9. 56	·1269					
12. 33	26. 40	10. 18	·1278					
12. 58	26. 30	10. 57	·1287					
13. 13	26. 30	11. 34	·1303					
13. 24	27. 35	12. 6	·1301					
13. 31	31. 30	12. 17	·1304					
13. 50	21. 50	12. 45	·1295					
14. 12	17. 10	13. 16	·1290					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 15		Feb. 15						
h m	° ′ ″	h m		h m		h m	°	°
14. 25	20. 19. 0	13. 24	·1283					
14. 34	18. 50	14. 1	·1326					
15. 39	30. 0	14. 19	·1305					
15. 54	32. 55	14. 42	·1288					
	***	15. 9	·1295					
16. 53	31. 40	15. 25	·1299					
17. 19	31. 30	15. 30	·1297					
17. 54	33. 5	16. 52	·1307					
18. 8	30. 35	17. 51	·1308					
18. 37	31. 50	18. 2	·1304					
19. 10	31. 25	18. 11	·1307					
19. 41	31. 50	18. 55	·1304					
19. 54	30. 30	19. 26	·1303					
20. 7	32. 10	19. 48	·1298					
20. 51	32. 35	20. 3	·1305					
21. 25	32. 0	20. 43	·1295					
21. 38	31. 5	20. 54	·1299					
22. 9	30. 50	21. 3	·1297					
22. 34	32. 10	21. 30	·1301					
22. 40	30. 50	21. 40	·1295					
23. 17	32. 55	22. 34	·1296					
23. 36	33. 5	22. 41	·1293					
23. 59	35. 0	23. 0	·1296					
		23. 56	·1294					
		23. 59	·1296					
Feb. 16		Feb. 16		Feb. 16		Feb. 16		
0. 0	20. 35. 0	0. 0	·1296	0. 0	·03460	1. 0	53·1	56·0
0. 23	35. 40	0. 42	·1300	2. 23	·03490	3. 0	53·4	56·1
0. 53	35. 30	1. 8	·1303	10. 30	·03515	Max.	54·9	57·4
1. 23	36. 20	1. 47	·1304	12. 28	·03496	9. 0	54·7	57·2
1. 49	35. 25	2. 5	·1309	13. 15	·03465	Min.	52·1	53·0
2. 23	35. 30	3. 5	·1308	15. 18	·03475	21. 0	53·4	53·0
3. 2	34. 55	3. 47	·1304	16. 40	·03470			
3. 45	33. 20	7. 21	·1311	17. 51	·03450			
4. 9	33. 30	7. 48	·1307	18. 6	·03460			
5. 21	32. 25	8. 25	·1312	18. 14	·03450			
7. 19	31. 30	9. 4	·1309	18. 25	·03460			
8. 0	30. 25	9. 39	·1311	18. 40	·03450			
8. 28	30. 25	9. 56	·1305	20. 45	·03470			
8. 41	31. 5	10. 15	·1313	21. 27	·03460			
9. 4	31. 10	10. 46	·1306	22. 5	·03450			
9. 38	29. 45	11. 19	·1308	22. 26	·03456			
10. 3	25. 25	11. 30	·1305	23. 26	·03446			
10. 19	26. 30	11. 43	·1307	23. 45	·03430			
10. 33	26. 25	11. 48	·1305	23. 59	·03460			
10. 48	25. 30	12. 1	·1309					
11. 14	28. 25	12. 17	·1305					
11. 26	27. 20	12. 52	·1311					
12. 8	28. 0	13. 7	·1305					
12. 44	33. 0	13. 54	·1320					
12. 56	33. 20	14. 37	·1307					
13. 9	29. 35	15. 23	·1305					
13. 41	27. 40	15. 43	·1312					
14. 11	27. 30	16. 16	·1313					
14. 32	29. 5	16. 48	·1323					
15. 26	30. 30	17. 32	·1317					
15. 31	31. 25	17. 53	·1308					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 16		Feb. 16						
h m	° ′ ″	h m		h m		h m	°	°
16. 8	20. 28. 50	18. 4	·1313					
16. 35	30. 15	18. 16	·1306					
16. 42	29. 45	18. 29	·1318					
17. 25	32. 40	18. 40	·1314					
17. 46	31. 30	19. 18	·1329					
18. 1	35. 35	19. 37	·1322					
18. 10	34. 0	19. 52	·1323					
18. 23	35. 55	20. 22	·1318					
18. 41	32. 30	20. 32	·1321					
18. 57	32. 10	20. 54	·1317					
19. 8	33. 35	21. 9	·1322					
19. 24	32. 45	21. 18	·1317					
19. 52	33. 20	22. 5	·1314					
20. 23	31. 55	22. 16	·1320					
20. 36	31. 5	22. 31	·1308					
20. 55	31. 50	23. 9	·1312					
21. 15	32. 5	23. 20	·1306					
21. 24	31. 0	23. 28	·1316					
21. 54	32. 0	23. 40	·1317					
21. 56	33. 25		***					
22. 8	33. 30	23. 59	·1292					
22. 13	31. 45							
22. 23	31. 30							
22. 34	32. 45							
22. 39	32. 50							
22. 44	31. 0							
23. 1	34. 5							
23. 9	34. 0							
23. 25	40. 25							
23. 28	41. 5							
	***							
23. 59	40. 0							
Feb. 17		Feb. 17		Feb. 17		Feb. 17		
0. 0	20. 40. 0	0. 0	·1292	0. 0	·03460	Min.	53·2	56·0
	***	0. 13	·1273	1. 9	·03490	1. 0	53·2	56·2
0. 26	38. 30	0. 15	·1279	2. 10	·03500	3. 0	53·9	57·0
0. 39	47. 30	0. 22	·1268	3. 1	·03520	9. 0	54·8	57·0
0. 45	49. 35	0. 33	·1274	3. 50	·03532	21. 0	54·9	57·0
0. 54	44. 10		***	3. 57	·03546	Max.	55·1	58·2
1. 37	39. 45	0. 48	·1268	4. 9	·03580			
2. 48	39. 55	0. 56	·1276	4. 28	·03572			
2. 56	43. 30	1. 19	·1273	4. 46	·03550			
3. 4	44. 55	1. 49	·1286	4. 55	·03550			
3. 42	42. 30	2. 30	·1297	5. 16	·03540			
3. 53	41. 30	2. 43	·1305	6. 9	·03560			
4. 0	43. 35	2. 58	·1316	6. 22	·03600			
4. 11	42. 30	3. 9	·1313	6. 41	·03570			
4. 23	44. 30	3. 15	·1316	7. 29	·03530			
4. 31	45. 40	3. 29	·1300	8. 0	·03580			
4. 38	42. 35	3. 40	·1301	8. 12	·03570			
4. 52	41. 30	3. 50	·1295	8. 26	·03603			
4. 56	41. 5	4. 1	·1299	8. 30	·03600			
5. 3	42. 0	4. 13	·1288	8. 56	·03630			
5. 9	41. 10	4. 18	·1285	9. 20	·03650			
5. 23	41. 30	4. 28	·1293	9. 37	·03640			
5. 47	39. 15	4. 41	·1285	10. 15	·03680			
5. 56	39. 0	4. 50	·1292	10. 30	·03710			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 17		Feb. 17		Feb. 17				
h m	° ′ ″	h m		h m		h m	°	°
6. 9	20. 40. 5	5. 4	·1284	10. 38	·03680			
6. 23	43. 30	5. 19	·1291	10. 54	·03640			
6. 29	39. 35	5. 31	·1286	11. 23	·03630			
6. 38	37. 10	5. 38	·1295	11. 42:	·03600			
6. 44	33. 20	5. 49	·1301	12. 11	·03603			
6. 56	18. 30	5. 59	·1301	12. 25	·03570			
7. 8	27. 30	6. 3	·1305		***			
7. 23	21. 50	6. 20	·1285	12. 55	·03580			
7. 34	22. 10	6. 36	·1292	13. 15	·03570			
7. 36	19. 0	6. 49	·1311	14. 11	·03580			
7. 53	15. 20	7. 0	·1331	14. 26	·03560			
8. 7	21. 0	7. 12	·1302	15. 23	·03564			
8. 22	38. 5	7. 18	·1302	16. 17	·03556			
8. 26	39. 45	7. 34	·1278	16. 56	·03557			
8. 34	38. 10	7. 46	·1289	17. 18	·03543			
8. 39	36. 50	7. 50	·1286	19. 33	·03550			
8. 48	39. 45	8. 3	·1297	21. 8	·03540 ·03563			
9. 4	44. 30		***					
9. 23	34. 10	8. 26	·1289	22. 0	·03560			
9. 39	37. 5	8. 34	·1295	23. 21	·03545			
9. 44	35. 40	8. 48	·1286	23. 59	·03545			
9. 58	29. 30	8. 56	·1273					
10. 11	33. 50	9. 18	·1282					
10. 24	30. 40	9. 42	·1263					
10. 35	22. 30	9. 53	·1270					
10. 37	25. 15	10. 9	·1265					
10. 48	8. 20	10. 18	·1269					
11. 0	22. 25	10. 24	·1285					
11. 4	22. 30	10. 33	·1260					
11. 30	33. 35	10. 42	·1272					
11. 37	33. 30	10. 49	·1255					
11. 41	33. 35	10. 58	·1260					
11. 54	32. 50	11. 6	·1259					
12. 8	37. 40	11. 19	·1283					
12. 16	36. 50	11. 43	·1279					
12. 23	35. 20	11. 46	·1275					
	***	11. 56	·1285					
12. 52	35. 5	12. 0	·1299					
13. 1	35. 5	12. 7	·1301					
13. 4	35. 30	12. 17	·1288					
13. 10	33. 55	12. 22	·1293					
13. 24	36. 30	12. 26	·1280					
13. 29	32. 25	12. 34	·1289					
13. 39	34. 5	12. 39	·1282					
13. 56	34. 30	12. 42	·1287					
14. 9	34. 30	12. 45	·1284					
14. 13	37. 35	12. 49	·1287					
14. 24	32. 5	12. 52	·1282					
	***	13. 1	·1288					
14. 47	31. 30	13. 12	·1275					
15. 17	33. 5	13. 21	·1287					
16. 6	31. 25	13. 32	·1279					
16. 44	36. 0	14. 5	·1282					
16. 55	36. 55	14. 15	·1294					
17. 4	36. 25	14. 26	·1286					
17. 9	36. 55	14. 42	·1282					
17. 21	35. 0	14. 46	·1288					
17. 30	36. 10	14. 53	·1282					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 17		Feb. 17						
h m	° ′ ″	h m		h m		h m	°	°
17. 37	20. 35. 50	15. 51	·1284					
17. 41	36. 30	16. 32	·1267					
17. 51	35. 45		***					
18. 18	34. 50	17. 30	·1288					
18. 25	34. 40		***					
18. 39	34. 25	18. 15	·1285					
	***	18. 27	·1288					
19. 38	34. 45	18. 41	·1284					
19. 46	33. 30	19. 1	·1289					
20. 2	34. 25	19. 10	·1283					
20. 9	34. 35		***					
20. 21	33. 40	20. 35	·1292					
20. 32	34. 35	20. 39	·1288					
20. 38	33. 30	20. 50	·1295					
20. 51	35. 5	21. 8	·1291					
21. 9	34. 0	21. 16	·1306					
21. 26	34. 5	22. 5	·1300					
21. 43	33. 55	22. 16	·1294					
22. 8	35. 5	23. 15	·1298					
22. 38	37. 50	23. 27	·1293					
23. 8	38. 45	23. 59	·1298					
23. 11	40. 25							
23. 22	40. 15							
23. 25	40. 45							
23. 31	39. 30							
23. 38	39. 45							
23. 49	44. 30							
23. 59	44. 20							
Feb. 18		Feb. 18		Feb. 18		Feb. 18		
0. 0	20. 44. 0	0. 0	·1298	0. 0	·03545	1. 0	54 ·9	57 ·0
0. 8	42. 45	0. 13	·1307	1. 5	·03540	3. 0	54 ·9	57 ·9
0. 23	43. 55	0. 16	·1300	1. 30	·03557	Max.	56 ·0	58 ·7
	(†)	0. 20	·1302	2. 3	·03590	9. 0	55 ·9	58 ·1
1. 0	46. 28*	0. 30	·1298	2. 30	·03610	Min.	54 ·2	56 ·0
1. 25	46. 0	0. 43	·1304	2. 46	·03648	22. 30	54 ·9	56 ·0
1. 29	44. 35		(†)	2. 54	·03640			
1. 48	45. 20	1. 0	·1298*	3. 5	·03650			
2. 3	46. 35	2. 7	·1305	3. 15	·03690			
2. 11	46. 25	2. 15	·1312	3. 21	·03670			
2. 24	48. 10	2. 19	·1308	3. 26	·03700			
2. 33	47. 15	2. 26	·1308	3. 30	·03670			
2. 47	49. 30	2. 32	·1315	3. 40	·03710			
2. 54	50. 25	2. 44	·1304	3. 45	·03720			
3. 4	57. 30	2. 50	·1309	3. 55	·03750			
3. 9	50. 30	2. 57	·1306	4. 9	·03790			
3. 17	53. 0	3. 6	·1308	4. 15	·03825			
3. 23	51. 5	3. 14	·1325	4. 24	·03810			
3. 28	53. 20	3. 24	·1300	4. 40	·03850			
3. 33	50. 55	3. 27	·1306	4. 45	·03870			
3. 37	40. 50	3. 35	·1287	4. 56	·03890			
3. 40	47. 20	3. 43	·1295	5. 10	·03850			
3. 42	53. 35	3. 47	·1282	5. 22	·03870			
3. 43	47. 25	3. 52	·1295	5. 30	·03910			
3. 44	41. 0	3. 55	·1266	5. 41	·03840			
3. 46	35. 10	4. 4	·1286	6. 0	·03808			
3. 57	42. 5	4. 14	·1286	6. 4	·03816			
4. 8	32. 0	4. 16	.1276	6. 9	.03820			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 18		Feb. 18		Feb. 18				
h m	° ′ ″	h m		h m		h m	°	°
4. 23	20. 49. 55	4. 30	·1310	6. 15	·03800			
4. 26	46. 40	4. 36	·1294	6. 38	·03810			
4. 29	37. 25	4. 44	·1282	6. 53	·03750			
4. 34	42. 30	4. 46	·1298	7. 4	·03740			
4. 40	39. 5	4. 51	·1270	7. 26	·03710			
4. 46	30. 30	5. 5	·1295	7. 33	·03713			
5. 3	47. 25	5. 13	·1270	7. 42	·03690			
5. 8	44. 35	5. 19	·1247	7. 53	·03680			
5. 14	26. 0	5. 31	·1274	8. 9	·03660			
5. 23	30. 35	5. 36	·1283	8. 39	·03635			
5. 32	41. 30	5. 44	·1263	9. 19	·03645			
5. 38	35. 20	5. 49	·1271	11. 0	·03652			
5. 47	40. 55	5. 55	·1260	12. 7	·03610			
5. 53	37. 50	6. 2	·1267	12. 16	·03610			
5. 58	38. 0	6. 8	·1262	12. 37	·03590			
6. 8	31. 5	6. 15	·1269	12. 53	·03546			
6. 11	32. 40	6. 20	·1253	13. 12	·03540			
6. 16	21. 30	6. 35	·1278	13. 30	·03500			
6. 23	17. 15	6. 40	·1284	13. 46	·03470			
6. 39	29. 50	6. 44	·1277	14. 8	·03510			
6. 42	31. 45	6. 50	·1283	14. 30	·03526			
6. 48	33. 50	7. 14	·1269	15. 9	·03560			
7. 4	33. 40	7. 24	·1298	16. 4	·03580			
7. 11	21. 35	7. 28	·1295	17. 39	·03586			
7. 22	14. 25	7. 32	·1299	18. 36	·03570			
7. 26	15. 50	7. 37	·1293	19. 4	·03556			
7. 31	18. 0	7. 43	·1304	19. 42	·03565			
7. 36	16. 35	7. 48	·1280	20. 25	·03580			
7. 44	26. 35	8. 0	·1301	21. 40	·03565			
7. 55	21. 0	8. 8	·1303	22. 9	·03560			
8. 17	35. 35	8. 23	·1284	22. 53	·03570			
8. 36	31. 0	8. 30	·1284	23. 25	·03576			
	***	8. 42	·1296		(†)			
9. 9	32. 5	8. 56	·1286					
9. 23	31. 0	9. 4	·1297					
	***	9. 16	·1290					
9. 41	32. 40		***					
9. 53	31. 0	9. 25	·1294					
	***	9. 34	·1280					
10. 8	32. 35	9. 43	·1279					
10. 13	31. 55	9. 49	·1287					
10. 26	32. 45	9. 58	·1285					
10. 36	32. 30	10. 4	·1291					
10. 43	33. 5	10. 9	·1287					
10. 48	32. 50	10. 15	·1290					
11. 4	33. 45	10. 27	·1286					
11. 15	33. 35		***					
11. 24	32. 40	10. 52	·1297					
11. 39	34. 45	11. 17	·1301					
12. 23	30. 30		***					
12. 32	33. 10	11. 52	·1285					
12. 40	31. 50	11. 58	·1275					
12. 56	34. 10	12. 16	·1290					
13. 12	37. 25	12. 27	·1322					
13. 17	43. 35	12. 42	·1336					
13. 24	39. 55	12. 50	·1329					
13. 34	39. 5	13. 4	·1336					
13. 53	26. 20	13. 16	·1305					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 18		Feb. 18						
h m	° ′ ″	h m		h m		h m	°	°
14. 9	20. 23. 5	13. 26	·1303					
	***	13. 36	·1282					
14. 26	24. 45	13. 53	·1281					
14. 55	30. 25	14. 14	·1300					
15. 17	30. 20	14. 25	·1302					
15. 26	31. 5	14. 48	·1290					
15. 56	29. 30	15. 12	·1291					
16. 19	30. 0	15. 16	·1296					
16. 23	30. 20	15. 44	·1301					
16. 26	29. 15	16. 9	·1296					
16. 38	31. 10	16. 26	·1300					
16. 46	29. 35	16. 30	·1295					
16. 54	31. 40	16. 38	·1301					
16. 56	31. 10	16. 44	·1296					
17. 4	30. 20	16. 48	·1302					
17. 10	33. 30	16. 59	·1299					
17. 23	32. 10	17. 8	·1304					
17. 46	25. 0	17. 15	·1299					
18. 11	41. 55	17. 26	·1305					
18. 24	41. 30	18. 1	·1297					
18. 33	42. 45	18. 12	·1304					
18. 40	40. 30	18. 31	·1301					
	***	19. 5	·1319					
19. 16	34. 35	19. 9	·1308					
19. 20	35. 30	19. 26	·1315					
19. 41	33. 45	19. 41	·1309					
20. 8	35. 20		***					
20. 16	37. 5	20. 14	·1312					
20. 36	34. 45		***					
20. 45	35. 15	20. 49	·1306					
20. 56	37. 10	21. 17	·1314					
21. 10	37. 10		***					
21. 21	39. 35	22. 0	·1291					
21. 24	38. 40	22. 12	·1299					
21. 38	39. 25	22. 16	·1287					
21. 45	40. 30	22. 21	·1293					
	***	22. 28	·1276					
22. 23	36. 40	22. 42	·1266					
22. 28	40. 25	23. 3	·1290					
22. 44	42. 30	23. 59	·1287					
22. 48	39. 5							
22. 59	39. 30							
23. 23	44. 25							
23. 25	43. 35							
23. 30	41. 5							
23. 38	43. 30							
23. 47	41. 0							
23. 59	44. 5							
Feb. 19		Feb. 19		Feb. 19		Feb. 19		
0. 0	20. 44. 5	0. 0	·1287		(†)	1. 0	54·9	56·0
0. 8	38. 25	0. 18	·1297	0. 13	·03590	Max.	55·0	56·4
0. 23	38. 35	0. 26	·1278	0. 36	·03625	9. 0	54·1	53·9
0. 53	43. 55	0. 37	·1290	1. 20	·03611	Min.	53·1	53·9
1. 38	40. 35	1. 14	·1296	2. 30	·03620	21. 0	53·7	55·0
1. 47	40. 25	1. 45	·1298	2. 50	·03620			
1. 54	40. 0	1. 59	·1304	3. 4	·03628			
2. 18	40. 25	2. 27	·1306	3. 40	·03680			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 19		Feb. 19		Feb. 19				
h m	° ′ ″	h m		h m		h m	°	°
2. 25	20. 41. 50	2. 33	·1303	4. 10	·03700			
2. 46	39. 40	2. 40	·1309	4. 52	·03660			
2. 55	41. 30	2. 50	·1300	5. 26	·03653			
3. 3	40. 5	2. 56	·1300	6. 20	·03620			
3. 10	29. 30	2. 59	·1291	8. 7	·03610			
3. 16	23. 35	3. 12	·1299	9. 14	·03608			
3. 23	18. 10	3. 24	·1268	10. 4	·03590			
	***	3. 30	·1276	10. 26	·03570			
3. 46	13. 0	3. 44	·1276	10. 42	·03580			
3. 49	13. 40	3. 52	·1291	11. 15	·03540			
3. 52	12. 25	4. 16	·1319	11. 30	·03530			
3. 56	13. 5	4. 27	·1319	12. 1	·03550			
4. 9	20. 20	4. 29	·1305	13. 15	·03560			
4. 34	28. 0	4. 33	·1308	14. 50	·03570			
4. 39	27. 30	4. 47	·1300	20. 45	·03580			
4. 48	27. 45	4. 51	·1303	21. 30	·03584			
5. 8	30. 20	5. 3	·1298	22. 17	·03560			
5. 24	35. 15	5. 12	·1302	23. 59	·03550			
5. 35	34. 45	5. 20	·1296					
5. 46	36. 35	5. 28	·1296					
6. 0	35. 50	5. 34	·1289					
6. 11	34. 10	6. 12	·1304					
6. 25	35. 0	6. 23	·1296					
6. 34	33. 35	6. 38	·1304					
6. 54	35. 40	7. 0	·1300					
7. 16	35. 0	7. 12	·1305					
7. 54	33. 55	7. 26	·1302					
8. 3	33. 20	8. 12	·1305					
8. 23	33. 50	8. 44	·1302					
8. 41	31. 35	9. 18	·1308					
9. 10	31. 55	9. 36	·1303					
9. 26	32. 30	9. 50	·1308					
9. 43	31. 25	10. 12	·1300					
10. 0	32. 40	10. 20	·1310					
10. 23	19. 0	10. 25	·1327					
10. 53	28. 15	10. 40	·1341					
11. 6	27. 50	10. 49	·1336					
11. 13	25. 25	11. 0	·1325					
11. 29	22. 35	11. 8	·1328					
11. 40	32. 15	11. 25	·1294					
12. 1	30. 30	11. 30	·1297					
12. 13	31. 25	11. 42	·1297					
12. 25	30. 30	11. 49	·1293					
12. 36	31. 40	12. 3	·1296					
12. 45	31. 30	12. 26	·1307					
12. 53	33. 20	12. 37	·1303					
13. 8	33. 25	12. 45	·1303					
13. 36	35. 0	12. 49	·1308					
13. 49	34. 35	12. 55	·1299					
14. 23	34. 50	13. 3	·1303					
14. 42	33. 45	13. 14	·1298					
15. 34	33. 20	13. 27	·1302					
15. 45	34. 5	13. 52	·1299					
16. 4	32. 55	14. 43	·1305					
16. 7	33. 50	16. 16	·1304					
16. 24	32. 5	16. 28	·1313					
16. 39	33. 0	16. 39	·1307					
	***	16. 43	·1310					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 19		Feb. 19						
h m	° ′ ″	h m		h m		h m	°	°
19. 39	20. 32. 30	16. 48	·1308					
19. 56	31. 55		***					
20. 23	32. 20	18. 22	·1307					
	***		***					
21. 6	33. 25	19. 53	·1314					
21. 28	34. 30	20. 7	·1312					
21. 40	34. 20	20. 15	·1316					
21. 54	35. 0	21. 4	·1304					
22. 8	34. 25	21. 10	·1308					
22. 12	35. 30	21. 27	·1307					
22. 24	35. 30	21. 35	·1309					
22. 39	37. 35	21. 52	·1300					
22. 52	37. 30	22. 5	·1306					
23. 23	40. 35		***					
23. 59	41. 15	22. 36	·1282					
		22. 44	·1286					
		22. 50	·1282					
		23. 22	·1296					
		23. 59	·1303					
Feb. 20		Feb. 20		Feb. 20		Feb. 20		
0. 0	20. 41. 15	0. 0	·1303	0. 0	·03550	1. 0	53·7	55·2
0. 14	40. 45	0. 5	·1305	1. 10	·03560	3. 0	53·7	55·2
0. 56	44. 15	0. 17	·1305	2. 5	·03580	Max.	54·1	56·3
1. 0	44. 20	0. 43	·1309	2. 44	·03587	9. 0	54·1	56·0
1. 8	44. 45	1. 14	·1294	3. 43	·03610	Min.	52·8	55·1
1. 36	46. 10	1. 40	·1300	5. 10	·03622	21. 0	53·2	55·3
1. 45	44. 50	1. 47	·1298	5. 53	·03630			
1. 56	46. 15	2. 6	·1308	6. 38	·03618			
2. 12	45. 0	2. 22	·1297	7. 17	·03620			
2. 16	44. 25	2. 31	·1300	7. 30	·03610			
2. 26	44. 25	2. 40	·1296	8. 3	·03650			
	***	3. 20;	·1308	8. 27	·03640			
3. 1	40. 30	3. 53	·1301	9. 15	·03650			
	***		***	10. 4	·03630			
3. 42	43. 0	4. 30	·1302	10. 45	·03620			
3. 53	42. 25	4. 43	·1293	11. 14	·03580			
3. 57	42. 25	4. 56	·1291	11. 45	·03560			
4. 2	41. 5	5. 15	·1295	12. 22	·03490			
4. 9	41. 5	5. 26	·1294	12. 38	·03500			
4. 14	39. 55	5. 40	·1308	12. 45	·03460			
4. 26	41. 35	5. 57	·1304	13. 5	·03420			
4. 38	41. 35	6. 6	·1305	13. 24	·03416			
4. 46	42. 5	6. 23	·1300	14. 14	·03470			
4. 53	40. 55	6. 37	·1307	14. 36	·03426			
5. 5	40. 25	6. 57	·1304	15. 14	·03500			
5. 9	41. 0	7. 4	·1306	17. 57	·03513			
5. 24	36. 50	7. 13	·1300	19. 56	·03504			
5. 39	38. 25	7. 20	·1302	22. 28	·03510			
6. 0;	39. 5	7. 36	·1288	23. 14	·03530			
6. 23	37. 30	7. 42	·1291	23. 59	·03520			
6. 34	37. 20	7. 53	·1289					
6. 53	38. 0	8. 12	·1295					
7. 4	36. 35	8. 20	·1288					
7. 8	33. 35	8. 27	·1291					
7. 19	33. 35	8. 36	·1285					
7. 30	37. 20	8. 54	·1287					
7. 40	38. 55	9. 4	·1280					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 20		Feb. 20						
h m	° ′ ″	h m		h m		h m	°	°
7. 51	20. 35. 35	9. 19	·1287					
8. 4	32. 25	9. 34	·1283					
8. 12	34. 20	9. 40	·1286					
8. 24	33. 0	9. 52	·1278					
8. 44	29. 0	10. 24	·1287					
8. 56	30. 5	10. 50	·1275					
9. 3	29. 10	11. 12	·1287					
9. 15	28. 5	11. 30	·1323					
9. 25	25. 30	11. 45	·1307					
9. 31	23. 55	11. 57	·1284					
9. 38	24. 50	12. 14	·1304					
9. 49	24. 0	12. 25	·1292					
10. 1	21. 35	12. 34	·1288					
10. 23	26. 30	12. 51	·1295					
10. 51	22. 5	13. 2	·1290					
11. 6	18. 30	13. 43	·1311					
11. 48	23. 20	14. 7	·1301					
12. 4	24. 30	14. 22	·1295					
12. 23	21. 55	14. 49	·1290					
12. 26	38. 15	15. 5	·1294					
12. 29	39. 25	15. 15	·1294					
12. 53	32. 55	15. 34	·1301					
13. 0	33. 5	15. 56	·1300					
13. 16	25. 30	16. 23	·1309					
13. 27	22. 20	16. 31	·1308					
13. 41	20. 40	16. 44	·1312					
13. 56	23. 30	17. 19	·1309					
14. 9	23. 20	18. 31	·1314					
14. 21	25. 5	19. 9	·1309					
14. 35	25. 30	19. 15	·1312					
14. 58	27. 10	20. 17	·1297					
15. 14	30. 0	20. 29	·1301					
15. 28	29. 20	20. 37	·1296					
15. 53	29. 25	21. 3	·1299					
16. 5	30. 30	22. 10	·1301					
16. 23	29. 5	22. 18	·1295					
16. 34	29. 0	22. 47	·1298					
17. 13	30. 5	23. 12	·1294					
17. 54	33. 20	23. 18	·1295					
18. 23	36. 35	23. 41	·1291					
18. 28	35. 55	23. 59	·1295					
19. 3	37. 30							
19. 9	37. 0							
19. 41	38. 10							
19. 55	37. 30							
20. 30	40. 0							
20. 38	39. 35							
20. 55	41. 5							
21. 23	41. 35							
22. 1	42. 40							
22. 8	43. 15							
22. 22	42. 5							
22. 33	42. 20							
22. 54	42. 50							
23. 24	42. 30							
23. 39	42. 50							
23. 59	45. 50							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 21		Feb. 21		Feb. 21		Feb. 21		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 45. 50	0. 0.	·1295	0. 0	·03520	1. 0	53·6	55·9
0. 5	44. 55	0. 55	·1290	0. 17	·03530	Min.	53·5	55·0
0. 10	43. 25	1. 9	·1297	0. 55	·03540	3. 0	53·5	55·0
0. 26	45. 25	1. 40	·1298	1. 40	·03570	Max.	56·4	61·4
0. 45	45. 30	1. 46	·1291	1. 50	·03570	9. 0	55·3	60·0
0. 55	44. 10	1. 53	·1295	2. 19	·03600	21. 0	54·9	55·0
1. 8	46. 0	2. 4	·1289	3. 8	·03606			
1. 39	47. 30	2. 14	·1298	3. 24	·03630			
1. 45	46. 10	2. 26	·1307	3. 53	·03650			
1. 53	46. 0	2. 35	·1300	4. 49	·03675			
2. 5	39. 30	2. 46	·1306	5. 56:	·03660			
2. 24	42. 10	3. 1	·1298	7. 23	·03670			
2. 33	45. 55	3. 20	·1296	8. 0	·03690			
2. 48	45. 55	3. 24	·1299	8. 40	·03710			
2. 54	46. 40	3. 37	·1285	8. 50	·03696			
3. 11	44. 30	3. 46	·1292	9. 22	·03700			
3. 23	47. 25	4. 0	·1274	9. 54	·03715			
3. 32	44. 30	4. 11	·1282	10. 22	·03710			
3. 38	39. 50	4. 16	·1278	10. 33	·03725			
3. 42	39. 50	4. 26	·1288	10. 45	·03700			
3. 51	42. 15	4. 32	·1290	11. 6	·03670			
3. 56	40. 10	4. 42	·1299	11. 24	·03680			
4. 4	40. 55	4. 46	·1295	11. 46:	·03660			
4. 13	36. 30	4. 53	·1297	12. 25	·03675			
4. 23	36. 0	5. 8	·1289	13. 5	·03650			
4. 30	34. 40	5. 27	·1295	13. 28	·03626			
4. 38	37. 35	5. 33	·1290	13. 54	·03520			
4. 53	41. 10	5. 40	·1294	14. 18	·03586			
5. 0	41. 20	5. 50	·1291	15. 6	·03625			
5. 6	40. 45	6. 0	·1295	16. 55	·03650			
5. 13	40. 20	6. 6	·1294	18. 40	·03657			
5. 24	42. 50	6. 35	·1302	18. 55	·03649			
5. 34	41. 0	6. 52	·1298	22. 3	·03650			
5. 39	41. 35	7. 13	·1289	22. 45	·03640			
5. 47	39. 55	7. 34	·1286	23. 59	·03645			
6. 2	40. 5	7. 45	·1295					
6. 13	38. 55	8. 14	·1278					
6. 43	42. 30	8. 26	·1291					
7. 4	42. 30	9. 19	·1281					
7. 11	38. 45	9. 29	·1274					
7. 25	36. 55	9. 40	·1274					
7. 38	32. 50	9. 44	·1268					
7. 48	34. 30	10. 2	·1287					
7. 59	34. 10	10. 26	·1337					
8. 7	34. 40	10. 45	·1293					
8. 14	32. 30	10. 56	·1297					
8. 23	30. 0	11. 0	·1296					
8. 30	31. 0	11. 12	·1312					
8. 36	31. 45	11. 36	·1288					
8. 55	27. 25	11. 43	·1289					
9. 9	27. 30	11. 49	·1281					
9. 16	28. 55	12. 3	·1287					
9. 35	26. 10	12. 7	·1296					
9. 55	7. 0	12. 13	·1289					
10. 25	30. 5	12. 20	·1295					
10. 40	20. 30	12. 25	·1291					
10. 51	22. 0	12. 30	·1294					
11. 3	22. 45	12. 32	·1289					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 21		Feb. 21						
h m	° ′ ″	h m		h m		h m	°	°
11. 9	20. 22. 0	12. 42	·1290					
11. 16	23. 5	13. 0	·1282					
11. 23	20. 35	13. 18	·1297					
11. 38	21. 0	13. 29	·1289					
11. 40	21. 0	13. 32	·1290					
11. 54	25. 10	13. 42	·1281					
12. 17	29. 25	13. 52	·1259					
12. 23	25. 55	14. 17	·1304					
12. 48	22. 30	14. 40	·1285					
12. 58	25. 0		***					
13. 16	41. 30	15. 18	·1296					
13. 31	35. 0		***					
13. 50	12. 20	18. 0	·1301					
14. 11	20. 55	18. 53	·1309					
14. 25	24. 40	20. 4	·1294					
	***	20. 47	·1298					
14. 51	28. 30	20. 49	·1295					
14. 58	28. 0	22. 14	·1309					
15. 9	29. 5	22. 20	·1303					
15. 14	28. 20	22. 28	·1308					
15. 27	28. 35	23. 9	·1299					
15. 40	29. 45	23. 30	·1304					
15. 55	29. 40	23. 37	·1301					
16. 5	30. 25	23. 59	·1306					
16. 37	29. 40							
16. 53	28. 55							
17. 2	29. 10							
17. 6	28. 30							
17. 44	30. 5							
17. 54	29. 45							
17. 59	30. 25							
	***							
18. 34	30. 30							
18. 43	32. 45							
19. 9	31. 35							
	***							
20. 8	34. 5							
20. 18	33. 30							
20. 30	35. 0							
20. 36	34. 0							
20. 41	34. 35							
20. 54	33. 40							
21. 8	32. 0							
21. 39	35. 30							
21. 54	33. 20							
22. 3	33. 30							
22. 11	36. 45							
22. 38	38. 5							
	***							
23. 1	35. 30							
23. 9	36. 0							
23. 24	36. 40							
23. 30	37. 35							
23. 59	38. 30							
Feb. 22		Feb. 22		Feb. 22		Feb. 22		
0. 0	20. 38. 30	0. 0	·1306	0. 0	·03645	Min.	54·7	57·0
	***	0. 8	·1309	1. 9	·03670	1. 0	54·7	57·2

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 22 h m	° ′ ″	Feb. 22 h m		Feb. 22 h m		Feb. 22 h m	°	°
0. 26	20. 39. 45	0. 25	·1305	1. 58	·03680	3. 0	54 ·7	57 ·6
0. 40	41. 45	0. 39	·1312	2. 19	·03700	Max.	56 ·5	59 ·9
0. 48	41. 15	0. 51	·1309	2. 48	·03690	9. 0	55 ·9	59 ·8
0. 49	42. 40	1. 4	·1317	2. 59	·03700	21. 0	55 ·5	58 ·3
0. 56	41. 40	1. 13	·1313	4. 11	·03710			
1. 3	42. 50	1. 30	·1315	5. 50	·03720			
1. 11	42. 10	2. 3	·1298	6. 11	·03730			
	***	2. 16	·1300	6. 23	·03728			
1. 45	42. 25		***	6. 38	·03740			
1. 55	43. 5	2. 37	·1296	6. 49	·03728			
2. 7	42. 40	2. 50	·1295	7. 5	·03760			
2. 13	44. 5	3. 4	·1308	7. 45	·03740			
2. 19	43. 10	3. 19	·1300	8. 26	·03733			
2. 26	40. 35	3. 22	·1305	9. 30	·03770			
2. 42	36. 40	4. 5	·1317	9. 45	·03780			
2. 46	37. 15	4. 27	·1311	9. 53	·03770			
2. 51	35. 25	4. 41	·1316	10. 3	·03780			
2. 58	35. 5	4. 59	·1307	10. 22	·03710			
3. 7	35. 45	5. 26	·1314	10. 33	·03720			
3. 17	35. 30	5. 40	·1305	11. 0	·03730			
3. 28	34. 30	6. 4	·1310	11. 24	·03740			
3. 45	35. 25	6. 14	·1290	12. 19	·03735			
4. 15	37. 15	6. 18	·1297	13. 0	·03740			
4. 27	36. 30	6. 31	·1275	13. 24	·03730			
4. 45	37. 45	6. 46	·1336	13. 40	·03740			
4. 56	36. 50	7. 2	·1332	14. 19	·03730			
5. 11	36. 55	7. 7	·1320	15. 0	·03732			
5. 16	37. 5	7. 14	·1321	15. 18	·03720			
5. 26	36. 30	7. 22	·1311	15. 54	·03710			
5. 35	36. 35	7. 41	·1316	16. 37:	·03720			
5. 41	35. 25	7. 54	·1309	17. 24	·03700			
5. 55	35. 45	8. 5	·1313	18. 38	·03720			
6. 6	34. 10	8. 42	·1300	22. 0	·03720			
6. 17	34. 55	9. 0	·1303	22. 30	·03710			
6. 23	31. 0	9. 23	·1296	23. 59	·03710			
6. 31	30. 50	9. 33	·1304					
6. 45	1. 10	9. 44	·1326					
7. 16	23. 45	9. 49	·1329					
7. 31	30. 20	9. 55	·1364					
7. 55	32. 30	10. 8	·1310					
8. 10	32. 40	10. 18	·1319					
8. 14	31. 5	10. 30	·1295					
8. 29	28. 55	10. 45	·1316					
8. 54	28. 15	10. 56	·1304					
9. 4	29. 0	11. 11	·1310					
9. 9	27. 35	11. 20	·1305					
9. 30	32. 5	11. 33	·1311					
9. 41	34. 35	12. 31	·1306					
9. 45	33. 5	13. 3	·1314					
9. 51	35. 30	13. 27	·1305					
9. 56	29. 10	13. 57	·1313					
10. 5	37. 30	14. 54	·1302					
10. 18	26. 25	15. 45	·1317					
10. 28	30. 30	15. 56	·1312					
10. 38	21. 30	16. 4	·1315					
10. 56	26. 35	16. 22	·1309					
11. 2	26. 25	16. 30	·1314					
11. 8	27. 30	16. 37	·1309					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 22 h m	° ′ ″	Feb. 22 h m		h m		h m	°	°
11. 13	20. 29. 55	17. 6	·1333					
11. 26	28. 30	17. 47:	·1307					
11. 35	28. 30	18. 19	·1311					
11. 49	30. 10	18. 49	·1317					
11. 56	28. 45	19. 23	·1321					
12. 38	30. 40		***					
13. 0	32. 5	20. 38	·1311					
13. 23	29. 20	20. 47	·1315					
13. 54	34. 10	21. 7	·1308					
14. 18	28. 30	21. 21	·1304					
14. 39	32. 30	21. 53	·1308					
14. 42	33. 5	22. 31	·1304					
15. 37	42. 10	22. 53	·1310					
	***	23. 0	·1306					
15. 54	32. 45	23. 15	·1312					
16. 17	32. 25	23. 42	·1304					
16. 35	34. 30	23. 50	·1313					
16. 48	33. 25	23. 59	·1304					
17. 9	32. 40							
17. 31	29. 30							
17. 49	30. 25							
18. 13	33. 50							
18. 26	32. 40							
18. 42	31. 55							
18. 58	32. 45							
19. 13	33. 10							
	***							
20. 23	33. 20							
21 4	33. 50							
21. 33	33. 30							
22. 19	36. 50							
22. 34	36. 20							
22. 54	37. 0							
23. 6	36. 35							
23. 39	38. 50							
23. 46	38. 15							
23. 59	39. 30							
Feb. 23		Feb. 23		Feb. 23		Feb. 23		
0. 0	20. 39. 30	0. 0	·1304	0. 0	·03710	1. 0	55 ·5	57 ·9
	***	0. 35	·1308	3. 7	·03760	3. 0	55 ·9	58 ·0
1. 8	41. 10	0. 42	·1306	4. 37	·03780	Max.	57 ·0	59 ·6
1. 40	39. 40	0. 50	·1309	6. 56	·03773	9. 0	56 ·4	59 ·3
1. 52	40. 15	0. 57	·1304	7. 9	·03795	Min.	55 ·3	56 ·0
2. 6	38. 55	1. 19	·1315	7. 26	·03784	21. 0	55 ·9	56 ·4
	***	1. 59	·1307	8. 45	·03790			
2. 49	39. 30	2. 9	·1312	9. 9	·03800			
3. 0	37. 55	2. 18	·1304	10. 4	·03810			
3. 10	37. 35	2. 47	·1316	10. 38	·03817			
3. 26	37. 55	3. 14	·1310	10. 49	·03810			
3. 43	36. 55	3. 31	·1317	11. 40	·03816			
	***	3. 41	·1311	12. 23	·03812			
4. 18	32. 0	3. 49	·1317	12. 38	·03790			
4. 30	31. 30	4. 27	·1303	13. 9	·03800			
5. 11	34. 35	5. 0	·1319	13. 50	·03780			
5. 27	33. 30	5. 18	·1324	14. 18	·03790			
5. 48	30. 10	5. 51	·1315	14. 55	·03800			
6. 9	34. 0	6. 6	·1323	15. 17	·03810			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 23		Feb. 23		Feb. 23				
h m	° ′ ″	h m		h m		h m	°	°
6. 23	20. 34. 50	6. 32	·1314	17. 30	·03812			
6. 44	32. 25	6. 43	·1317	19. 38	·03800			
7. 0	19. 30	7. 3	·1307	21. 4	·03790			
7. 19	26. 50	7. 14	·1349	23. 0	·03782			
7. 26	24. 35	7. 27	·1330	23. 59	·03816			
7. 34	25. 30	7. 34	·1332					
7. 38	25. 35	7. 46	·1329					
7. 55	27. 55	8. 2	·1317					
8. 4	26. 30	8. 11	·1320					
8. 11	27. 15	8. 19	·1316					
8. 23	23. 55	8. 42	·1330					
8. 39	23. 15	9. 4	·1308					
8. 55	26. 0	9. 14	·1313					
9. 11	26. 50	9. 56	·1308					
9. 17	27. 55	10. 21	·1320					
9. 32	30. 30	10. 44	·1307					
9. 45	30. 30	10. 59	·1313					
9. 54	31. 5	11. 14	·1302					
10. 8	29. 45	11. 18	·1305					
10. 36	32. 25	11. 30	·1300					
10. 54	28. 35	11. 40	·1307					
11. 1	26. 50	11. 43	·1304					
11. 19	29. 30	11. 54	·1313					
11. 30	29. 35	12. 16	·1314					
11. 41	27. 30	12. 26	·1294					
11. 48	28. 50	12. 36	·1297					
11. 56	27. 10	12. 42	·1293					
12. 11	29. 15	13. 5	·1307					
12. 23	29. 20	13. 10	·1303					
12. 30	33. 45	13. 19	·1302					
12. 35	27. 30	13. 37	·1313					
12. 42	24. 0	13. 50	·1307					
13. 14	33. 50	14. 2	·1311					
13. 24	33. 30	14. 16	·1303					
13. 36	33. 50	14. 30	·1309					
13. 48	30. 35	14. 42	·1300					
14. 14	31. 5	14. 55	·1300					
14. 33	33. 35	15. 15	·1308					
14. 54:	33. 15	17. 11	·1307					
15. 16	34. 55	18. 25	·1316					
15. 48	33. 45	18. 54	·1318					
16. 4	33. 55	19. 19	·1322					
16. 12	32. 35	19. 27	·1318					
17. 8	33. 0	19. 36	·1321					
17. 15	32. 30	20. 12	·1313					
17. 36	33. 25	20. 28	·1320					
17. 39	34. 0	21. 4	·1312					
18. 0	33. 25	21. 43	·1316					
18. 23	33. 35	21. 50	·1310					
18. 38	32. 55	21. 53	·1315					
18. 54	33. 30	22. 3	·1308					
19. 26	32. 25	22. 22	·1316					
19. 41	32. 20	22. 48	·1308					
20. 5	33. 5	23. 45	·1316					
20. 26	33. 30	23. 59	·1312					
20. 58	32. 45							
21. 35	33. 5							
21. 53	34. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 23								
h m	° ′ ″	h m		h m		h m	°	°
22. 5	20. 33. 0							
22. 18	35. 15							
22. 34	35. 30							
22. 41	36. 30							
22. 51	35. 0							
23. 41	37. 10							
23. 59	37. 20							
Feb. 24		Feb. 24		Feb. 24		Feb. 24		
0. 0	20. 37. 20	0. 0	·1312	0. 0	·03816	1. 0	55 ·0	57 ·2
0. 19	36. 50	0. 11	·1313	0. 30	·03825	3. 0	56 ·1	57 ·4
0. 44	37. 55	0. 16	·1310	2. 9	·03840	Max.	56 ·3	58 ·7
1. 8	37. 30	0. 34	·1317	3. 0	·03850	9. 0	56 ·1	57 ·0
2. 6	39. 10	1. 5	·1314	3. 22	·03858	Min.	53 ·8	54 ·8
2. 31	38. 5	1. 29	·1318	4. 40	·03850	21. 0	54 ·8	55 ·0
3. 10	36. 5	2. 20	·1316	6. 41	·03860			
3. 38	37. 0	3. 4:	·1314	10. 42	·03854			
4. 13	35. 55	3. 32	·1324	13. 30	·03865			
4. 20	36. 15	4. 3	·1316	17. 30	·03865			
4. 55	34. 40	5. 12	·1316	19. 22	·03857			
5. 18	34. 25	5. 36	·1322	20. 15	·03850			
6. 0	33. 5	6. 3	·1315	21. 51	·03835			
6. 10	31. 40	6. 33	·1321	22. 27	·03820			
6. 30	31. 20	7. 0	·1317	23. 27	·03824			
6. 55	33. 25	9. 42	·1320	23. 59	·03825			
7. 11	33. 35	9. 50	·1330					
7. 34	33. 10	10. 4	·1325					
8. 34	33. 25	10. 35	·1322					
8. 48	32. 15	13. 12	·1324					
9. 30	33. 25	13. 56	·1320					
10. 6	33. 0	15. 29	·1324					
10. 12	34. 10	18. 48	·1327					
10. 41	32. 55	19. 30	·1321					
10. 56	33. 15	19. 53	·1329					
12. 43	33. 45	20. 30	·1323					
13. 28	33. 50	20. 42	·1327					
13. 46	32. 45	21. 2	·1316					
15. 33	32. 50	21. 23	·1318					
15. 54	33. 35	21. 34	·1315					
16. 56	32. 55		* * *					
18. 19	33. 5	22. 40	·1323					
19. 33	33. 45	22. 55	·1316					
19. 39	32. 40	23. 41	·1323					
20. 15	34. 30		(†)					
20. 39	33. 25							
21. 8	32. 50							
21. 36	34. 35							
21. 41	33. 30							
22. 8	36. 0							
22. 15	35. 35							
22. 23	35. 0							
22. 43	36. 25							
23. 0	35. 35							
23. 9	36. 30							
23. 21	36. 15							
23. 59	36. 20							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 25		Feb. 25		Feb. 25		Feb. 25		
h m	° ′ ″	h m		h m		h m	°	
0. 0	20. 36. 20		(†)	0. 0	·03825	1. 0	54 ·2	55 ·3
0. 37	37. 5	0. 32	·1324	1. 2	·03830	3. 0	54 ·7	56 ·3
0. 41	36. 30	2. 25	·1324	2. 33	·03845	Max.	55 ·6	58 ·1
0. 48	36. 55	3. 12	·1314	4. 15	·03850	9. 0	55 ·4	57 ·5
1. 11	36. 20	3. 49	·1322	5. 40	·03860	Min.	53 ·8	54 ·9
1. 34	36. 5	4. 23	·1318	7. 15	·03867	22. 30	54 ·5	55 ·0
1. 39	36. 50	4. 51	·1322	8. 3	·03880			
1. 47	36. 25	5. 16	·1318	8. 39	·03890			
2. 0	36. 35	7. 4	·1319	10. 38	·03882			
2. 34	36. 0	7. 47	·1308	13. 8	·03872			
2. 45	34. 30	8. 0	·1311	13. 22:	·03878			
3. 1	35. 15	8. 13	·1308	13. 56	·03810			
4. 8	35. 0	8. 42	·1317	14. 19	·03806			
4. 40	35. 0	9. 5	·1314	14. 55:	·03840			
5. 9	33. 50	9. 36	·1321	15. 48	·03870			
5. 41	34. 30	9. 54	·1318	16. 8	·03860			
5. 56:	33. 35	11. 49	·1326	16. 49	·03870			
6. 25	35. 10	12. 41	·1319	17. 21	·03860			
6. 40	34. 55	12. 58	·1319	17. 53	·03866			
7. 26	29. 40	13. 16	·1334	19. 0	·03855			
7. 41	29. 50	13. 35	·1350	20. 23	·03870			
7. 53	29. 0	13. 57	·1332	21. 27	·03860			
8. 6	29. 30	14. 7	·1335	22. 23	·03850			
8. 13	29. 25	14. 27	·1318	23. 21	·03840			
8. 26	28. 35	14. 33	·1318	23. 59	·03850			
8. 58	36. 30	14. 42	·1315					
9. 40	32. 30	15. 34	·1321					
9. 54	32. 0	15. 41	·1315					
10. 41	33. 20	15. 52	·1321					
11. 41	33. 35	16. 19	·1321					
12. 36	31. 0	16. 38	·1317					
12. 53	31. 55	17. 13	·1328					
13. 23	43. 40	17. 32	·1316					
13. 38	35. 55	17. 46	·1314					
14. 11	24. 30	18. 17	·1326					
14. 26	24. 30	18. 25	·1322					
14. 44	27. 30	18. 30	·1326					
	***	19. 20	·1323					
15. 40	29. 45	19. 30	·1326					
15. 51	26. 55	19. 37	·1323					
16. 9	29. 25	20. 29	·1320					
	***	20. 48	·1326					
16. 39	28. 30	22. 12	·1312					
16. 41	26. 55	23. 34	·1322					
17. 1	27. 50	23. 59	·1314					
17. 7	27. 15							
17. 38	31. 30							
17. 58	33. 20							
18. 14	33. 30							
18. 23	34. 30							
18. 28	33. 5							
18. 36	33. 35							
19. 0	32. 5							
19. 11	32. 35							
19. 23	31. 55							
19. 39	32. 30							
19. 45	32. 0							
20. 0	32. 25							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 25								
h m	° ′ ″	h m		h m		h m	°	°
20. 24	20. 32. 0							
20. 34	31. 20							
	***							
21. 7	33. 45							
21. 11	32. 40							
21. 26	32. 55							
22. 3	32. 30							
22. 10	33. 10							
22. 16	33. 0							
22. 24	33. 45							
23. 7	35. 30							
23. 24	38. 50							
23. 45	40. 0							
23. 50	38. 30							
23. 59	39. 5							
Feb. 26		Feb. 26		Feb. 26		Feb. 26		
0. 0	20. 39. 5	0. 0	·1314	0. 0	·03850	1. 0	54 ·1	54 ·9
0. 14	38. 55	0. 12	·1313	2. 19	·03860	Max.	54 ·2	55 ·2
0. 24	39. 35	0. 19	·1318	2. 23	·03870	7. 15	53 ·9	55 ·2
0. 49	40. 15	0. 35	·1314	2. 31	·03860	Min.	53 ·0	54 ·0
1. 15	40. 25	1. 17	·1317	2. 53	·03870	21. 0	53 ·0	54 ·0
1. 30	39. 55	1. 27	·1314	3. 35	·03890			
1. 39	40. 30	1. 41	·1319	3. 50	·03886			
1. 46	40. 5	1. 47	·1313	4. 25	·03910			
1. 55	40. 35	2. 6	·1319	5. 52	·03900			
2. 3	40. 55	2. 17	·1314	6. 42	·03906			
2. 16	40. 0	2. 30	·1318	7. 7	·03890			
2. 29	40. 30	2. 43	·1312	9. 0	·03892			
2. 34	38. 45	2. 55	·1323	9. 30	·03900			
2. 41	38. 35	3. 7	·1317	10. 43	·03890			
2. 49	40. 30	3. 14	·1319	11. 20	·03880			
3. 8	39. 25	3. 18	·1316	11. 33	·03870			
3. 11	38. 30	3. 43	·1321	12. 55	·03870			
3. 24	38. 0	4. 3	·1311	15. 26	·03880			
3. 35	39. 55	4. 35	·1319	16. 26	·03890			
3. 42	39. 5	4. 45	·1315	19. 3	·03886			
3. 51	36. 35	4. 52	·1319	19. 44	·03880			
3. 56	36. 25		***	21. 40	·03866			
4. 8	34. 55	6. 27	·1313	23. 0	·03870			
4. 19	32. 55	6. 46	·1324	23. 15	·03875			
4. 38	34. 30	7. 2	·1316	23. 59	·03875			
4. 41	33. 55	7. 14	·1338					
4. 52	35. 55	7. 26	·1326					
4. 56	35. 55	8. 5	·1318					
5. 2	37. 0	8. 20	·1320					
5. 11	35. 50	8. 53	·1313					
5. 44	35. 40	9. 6	·1305					
6. 10	33. 55	9. 18	·1308					
6. 24	34. 0	9. 38	·1310					
6. 33	31. 50	9. 53	·1304					
6. 40	33. 0	10. 21	·1313					
6. 48	33. 0	10. 47	·1318					
7. 8	26. 20	11. 27	·1317					
7. 19	30. 0	11. 36	·1314					
7. 30	29. 45	12. 4	·1322					
7. 45	31. 20	12. 27	·1316					
	***	12. 36	·1320					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 26		Feb. 26						
h m	° ′ ″	h m		h m		h m	°	°
8. 26	20. 33. 10	12. 43	·1317					
8. 49	32. 55	13. 30	·1319					
9. 11	29. 40	13. 49	·1312					
9. 30	30. 0	14. 34	·1315					
9. 43	32. 35	14. 50	·1320					
9. 48	32. 35	16. 8	·1315					
9. 55	30. 55	17. 20	·1323					
10. 8	31. 30	17. 30	·1320					
10. 16	31. 30	18. 24	·1321					
10. 24	32. 10	18. 31	·1324					
10. 38	30. 30	19. 5	·1317					
10. 56	30. 35	20. 3	·1328					
11. 9	32. 10	20. 32	·1322					
11. 56	28. 15	22. 6	·1323					
12. 13	29. 30	23. 15	·1309					
12. 31	28. 40	23. 59	·1314					
12. 43	30. 55							
12. 54	29. 45							
13. 2	27. 35							
	***							
13. 46	28. 35							
14. 8	30. 45							
14. 28	31. 40							
14. 51	31. 50							
15. 19	29. 45							
15. 56	30. 40							
16. 9	30. 15							
16. 17	31. 50							
16. 24	31. 45							
16. 28	32. 15							
16. 40	30. 10							
17. 27	30. 25							
17. 48	32. 25							
18. 27	32. 25							
19. 4	33. 40							
19. 41	33. 30							
19. 55	34. 5							
20. 51	32. 25							
	***							
21. 34	32. 35							
22. 30	34. 55							
23. 0	35. 50							
23. 59	37. 15							
Feb. 27		Feb. 27		Feb. 27		Feb. 27		
0. 0	20. 37. 15	0. 0	·1314	0. 0	·03875	Min.	53 ·3	55 ·3
0. 48	37. 30	0. 46	·1320	0. 51	·03900	1. 0	54 ·0	57 ·0
0. 56	39. 30	0. 57	·1326	1. 4	·03910	3. 0	54 ·8	58 ·0
1. 3	38. 15	1. 0	·1317	1. 35	·03920	9. 0	55 ·7	58 ·0
1. 13	39. 35	1. 6	·1325	2. 1	·03930	21. 0	55 ·9	58 ·0
1. 48	38. 25	1. 11	·1319	2. 25	·03944	Max.	56 ·0	58 ·2
2. 16	38. 35	1. 44	·1315	3. 11	·03960			
2. 30	38. 0	2. 22	·1322	3. 54	·03980			
2. 52	37. 20	2. 55	·1317	4. 23	·04006			
4. 59	34. 40	3. 10	·1320	7. 30	·04040			
6. 48	33. 30	4. 41	·1325	9. 9	·04060			
8. 4	33. 30	5. 3	·1323	11. 1	·04080			
10. 23	32. 5	7. 30	·1325	17. 27	·04127			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 27		Feb. 27		Feb. 27				
h m	° ′ ″	h m		h m		h m	°	°
10. 46	20 31. 0	7. 35	·1321	19. 30	·04140			
10. 56	31. 0	7. 56	·1323		(†)			
11. 9	31. 50	10. 2	·1316	21. 0	·04156*			
11. 18	31. 10	11. 1	·1325		(†)			
11. 58	31. 30	11. 13	·1321	23. 29	·03790			
13. 9	33. 0	11. 26	·1324	23. 59	·03750			
17. 17	33. 25	11. 50	·1320					
18. 57	33. 5	19. 1	·1325					
20. 55	31. 10	20. 22	·1326					
21. 34	31. 20	21. 4	·1320					
23. 13	35. 5	22. 41	·1313					
23. 37	36. 45	23. 15	·1316					
23. 59	39. 10	23. 59	·1317					
Feb. 28		Feb. 28		Feb. 28		Feb. 28		
0. 0	20. 39. 10	0. 0	·1317	0. 0	·03750	1. 0	56 ·8	59 ·0
0. 43	39. 0	1. 12	·1316	0. 30	·03756	3. 0	56 ·7	59 ·2
1. 9	38. 10		(†)	1. 4	·03724	Max.	57 ·3	59 ·6
	(†)	2. 56	·1306	1. 23	·03746	9. 0	56 ·9	58 ·8
2. 46	38. 15	3. 37	·1321	2. 9	·03748	21. 0	56 ·0	57 ·0
3. 26	37. 45	4. 41	·1318	2. 45	·03765	22. 0	56 ·0	56 ·7
4. 9	35. 45	5. 36	·1315	3. 38	·03775	Min.	55 ·9	56 ·7
5. 56	35. 0	5. 56	·1317	9. 30	·03850	23. 0	55 ·9	57 ·4
7. 7	33. 35	10. 57	·1321	13. 52	·03890			
8. 18	34. 15	14. 39	·1320	21. 16	·03930			
8. 48	33. 45	15. 11	·1325		(†)			
10. 10	32. 55	17. 40	·1330					
10. 24	31. 55	18. 43	·1324					
10. 54	33. 0	19. 14	·1327					
14. 41	34. 0	21. 4	·1321					
15. 23	33. 40	21. 27	·1317					
15. 49	32. 35	21. 45	·1313					
16. 11	33. 30	21. 49	·1324					
20. 21	31. 55	22. 3	·1312					
20. 30	32. 25	22. 27	·1320					
21. 10	33. 35	22. 30	·1316					
	***	23. 43	·1315					
23. 10	33. 0	23. 59	·1318					
23. 18	34. 30							
23. 25	33. 30							
23. 38	34. 35							
23. 47	33. 30							
23. 56	35. 20							
23. 59	35. 25							
Mar. 1		Mar. 1		Mar. 1		Mar. 1		
0. 0	20. 35. 25	0. 0	·1318	0. 0	·03163	0. 0	55 ·9	58 ·0
0. 9	35. 30	0. 15	·1313	2. 33	·03163	1. 0	56 ·0	58 ·1
0. 19	34. 25	0. 42	·1317	3. 41	·03190	3. 0	56 ·2	59 ·0
	***	1. 29	·1312	4. 10	·03190	Max.	57 ·4	60 ·0
1. 31	38. 55	1. 38	·1316	4. 54	·03204	9. 0	56 ·7	59 ·0
1. 39	40. 30	1. 49	·1308	12. 22	·03167	21. 0	55 ·9	57 ·0
2. 28	37. 25	2. 0	·1308	12. 45	·03170	22. 0	55 ·9	56 ·9
	***	2. 11	·1312	13. 32	·03150	Min.	55 ·9	56 ·9
2. 55	38. 10	2. 31	·1310	14. 53	·03140	23. 30	55 ·9	57 ·3
2. 58	37. 50	3. 12	·1319	16. 38	·03140			
3. 56	37. 30	3. 51	·1317	22. 18	·03115			
4. 9	35. 50	4. 6	·1308	23. 59	·03100			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

February 27d. 22h. 43m. Vertical Force. The adjustments were altered so that the readings were diminished by 9.22 divisions, or by 0·004817 parts of the whole Vertical Force.

February 28d. 22h. The Vertical Force Magnet was removed from its box and carefully examined and cleaned. Upon being replaced upon the agate planes, it was found that the readings had been diminished by 7.88 divisions, or by 0·005160 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 1		Mar. 1						
h m	° ′ ″	h m		h m		h m	°	°
4. 15	20. 35. 45	4. 50	·1316					
4. 25	34. 40	5. 9	·1313					
4. 40	33. 55	6. 34	·1319					
5. 24	34. 0	6. 56	·1310					
6. 45	31. 30	7. 22	·1324					
6. 59	28. 20		***					
7. 6	28. 15	8. 25	·1320					
7. 15	24. 30	8. 54	·1315					
	***	10. 4	·1319					
8. 18	27. 0	10. 47	·1313					
8. 41	30. 35	11. 12	·1318					
10. 13	30. 55	11. 27	·1315					
10. 27	30. 30	11. 50	·1321					
12. 3	30. 30	12. 11	·1316					
12. 26	29. 10	12. 24	·1316					
12. 56	32. 5	12. 48	·1325					
13. 18	30. 30	13. 54	·1315					
13. 28	30. 45	14. 25	·1317					
13. 40	30. 0	14. 45	·1314					
14. 18	29. 55	15. 28	·1314					
14. 48	30. 55	15. 50	·1318					
15. 8	29. 45	16. 48	·1312					
15. 16	30. 25	16. 55	·1317					
15. 26	29. 35	17. 5	·1313					
15. 55	29. 5		***					
16. 4	28. 10	19. 29	·1326					
16. 23	27. 35	19. 34	·1322					
16. 41	27. 25	20. 27	·1325					
17. 16	28. 30	22. 21	·1313					
18. 9	31. 45	23. 11	·1313					
19. 18	30. 45		(†)					
19. 32	31. 0							
20. 4	30. 15							
	***							
20. 51	30. 10							
21. 4	29. 45							
21. 46	30. 20							
	(†)							
Mar. 2		Mar. 2		Mar. 2		Mar. 2		
	(†)		(†)	0. 0	·03100	0. 0	55 ·9	57 ·5
1. 0	20. 37. 44*	1. 0	·1315*	0. 58	·03115	1. 0	56 ·0	57 ·9
2. 3	37. 35	2. 0	·1322	2. 4	·03142	3. 0	56 ·6	58 ·0
2. 38	37. 15	2. 40	·1324	4. 53	·03200	Max.	57 ·5	58 ·5
2. 56	36. 50	2. 43	·1331	8. 11	·03165	9. 0	56 ·0	56 ·4
3. 9	35. 35	3. 3	·1323	10. 7	·03166	Min.	54 ·9	56 ·0
3. 26	35. 35	4. 21	·1331	12. 19	·03130	21. 0	55 ·8	56 ·7
4. 10	34. 25	4. 50	·1326	16. 0	·03128			
4. 44	34. 35	5. 39	·1326	18. 40	·03110			
6. 8	33. 0	5. 59	·1331	21. 10	·03107			
6. 16	32. 15	6. 4	·1329	21. 20	·03090			
6. 31	32. 30	6. 26	·1338	22. 54	·03080			
6. 41	33. 30	6. 51	·1326	23. 32	·03060			
7. 14	28. 25	7. 6	·1327	23. 59	·03057			
7. 23	27. 30	7. 16	·1333					
7. 26	28. 5	7. 25	·1330					
7. 36	27. 25	7. 42	·1334					
7. 56	31. 5	8. 0	·1327					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 2		Mar. 2						
h m	° ′ ″	h m		h m		h m	°	°
8. 16	20. 28. 15	8. 5	·1319					
8. 32	30. 50	8. 29	·1329					
8. 46	31. 25	8. 48	·1315					
9. 13	29. 30	9. 12	·1319					
9. 28	27. 20	9. 23	·1316					
9. 56	29. 0	9. 34	·1321					
10. 41	29. 45	9. 45	·1316					
10. 49	31. 5	10. 25	·1323					
11. 16	27. 25	10. 30	·1321					
11. 39	28. 40	10. 52	·1328					
11. 56	28. 30	11. 22	·1339					
14. 4	33. 5	11. 29	·1338					
14. 23	32. 25	11. 50	·1329					
14. 55	32. 0	12. 28	·1321					
15. 18	32. 25	13. 54	·1323					
15. 55	31. 35	14. 0	·1321					
16. 14	32. 30	16. 15	·1326					
16. 21	31. 25	16. 22	·1321					
18. 11	31. 25	16. 30	·1326					
18. 51	32. 30	17. 25	·1328					
19. 34	33. 5	17. 34	·1323					
20. 9	31. 25	18. 24	·1331					
20. 24	31. 40	18. 52:	·1324					
20. 44	31. 55	19. 29	·1331					
21. 7	31. 0	20. 5	·1328					
21. 38	31. 0	20. 16	·1334					
22. 24	32. 5	21. 11	·1331					
22. 38	32. 5	21. 26	·1324					
22. 56	33. 25	22. 25	·1322					
23. 24	34. 5	22. 45	·1309					
23. 59	35. 30	23. 11	·1314					
		23. 26	·1320					
		23. 37	·1305					
		23. 49	·1306					
			(†)					
Mar. 3		Mar. 3		Mar. 3		Mar. 3		
0. 0	20. 35. 30		(†)	0. 0	·03057	1. 0	56 ·5	57 ·6
0. 58	38. 10	0. 8	·1315	2. 1	·03086	3. 0	55 ·9	58 ·6
1. 24	38. 15	1. 12	·1323	5. 8:	·03160	Max.	57 ·0	59 ·6
2. 57	37. 30	2. 6	·1320	8. 19	·03190	9. 0	56 ·9	59 ·0
4. 39	34. 5	2. 24	·1323	14. 25	·03216	Min.	55 ·5	56 ·9
5. 2	32. 55	3. 25	·1320	21. 13	·03200	21. 0	55 ·8	57 ·0
5. 27	32. 15	4. 32	·1323		(†)			
5. 44	33. 0	4. 53	·1318					
6. 29	33. 20		***					
7. 11	33. 5	6. 44	·1331					
7. 24	32. 30	7. 8	·1328					
7. 44	32. 25	7. 14	·1322					
8. 7	28. 30	7. 30	·1327					
8. 35	32. 15	7. 49	·1325					
8. 40	31. 50	7. 58	·1318					
8. 59	32. 30	8. 46	·1326					
9. 26	31. 0	9. 33	·1319					
9. 51	30. 40	9. 45	·1322					
9. 55	31. 20	10. 22	·1316					
10. 14	31. 0	10. 38	·1320					
10. 26	29. 55	11. 0	·1319					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

March 1d. 22h. to March 2d. 2h. Between these times the time of vibration of the Declination Magnet, with its damper in different positions, and also with the damper of the Horizontal Force Magnet, was determined.

March 3d. 23h. The V.F. Magnet was examined by the Astronomer Royal. Photographic lamp not in action, from March 3d. 21h. 37m.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 3		Mar. 3						
h m	° ′ ″	h m		h m		h m	°	°
10. 40	20. 31. 5	11. 11	·1323					
11. 6	30. 5	12. 33	·1314					
11. 22	31. 0	12. 49	·1320					
12. 26	31. 10	13. 17	·1317					
12. 31	30. 50	14. 18	·1316					
12. 52	32. 5	14. 25	·1322					
13. 27	31. 55	17. 14	·1323					
13. 39	31. 35	19. 11	·1327					
14. 0	32. 15	20. 43	·1324					
14. 38	32. 50	21. 2	·1322					
14. 56	32. 5	21. 8	·1313					
16. 23	32. 45	21. 34	·1312					
16. 39	32. 20		(†)					
17. 8	31. 55							
19. 40	31. 40							
20. 24	30. 40							
21. 36	30. 35							
	(†)							
Mar. 4		Mar. 4		Mar. 4		Mar. 4		
	(†)		(†)		(†)	1. 0	54·6	55·2
1. 0	20. 38. 17*	1. 0	·1320*	1. 0	·03092*	3. 0	54·6	55·1
2. 4	38. 50	2. 11	·1317	3. 0	·03099*	Min.	53·2	54·3
3. 47	35. 30	2. 36	·1321	9. 0	·03188*	9. 0	55·0	57·8
4. 11	35. 15	2. 44	·1314	10. 30	·03192	22. 10	55·8	57·7
4. 19	34. 55		***	11. 53	·03190	Max.	56·2	58·2
4. 49	33. 25	3. 24	·1324	12. 4	·03207			
8. 41	32. 50	4. 2	·1321	12. 24	·03196			
9. 1	29. 35	4. 24	·1324	13. 19	·03210			
9. 26	29. 35	4. 31	·1318	15. 10	·03220			
10. 13	32. 35	4. 44	·1320	16. 39	·03240			
10. 36	30. 40	4. 50	·1315	22. 38	·03233			
10. 58	32. 40	5. 29	·1322	23. 18	·03216			
11. 43	29. 50	5. 58	·1322		(†)			
12. 4	33. 40	6. 8	·1319					
12. 38	30. 30	7. 43	·1324					
12. 56	30. 20	8. 11	·1323					
13. 26	32. 40	8. 19	·1324					
13. 56	31. 30	9. 4	·1319					
14. 4	32. 20	9. 10	·1323					
15. 0	30. 30	9. 51	·1316					
15. 23	30. 25	10. 7	·1328					
15. 38	31. 0	10. 16	·1328					
	***	10. 43	·1318					
16. 39	31. 10	10. 52	·1323					
17. 23	33. 0	10. 59	·1320					
17. 38	32. 25	11. 17	·1327					
18. 2	33. 5	11. 46	·1319					
18. 25	32. 15	12. 5	·1330					
18. 43	32. 25	12. 28	·1317					
18. 54	31. 30	12. 56	·1316					
19. 10	32. 25	13 17	·1323					
19. 34	31. 5	13. 53	·1316					
20. 0	31. 40	14. 3	·1323					
20. 13	30. 25	14. 8	·1319					
20. 25	31. 15	15. 22	·1316					
21. 18	31. 0	17. 13	·1320					
21. 26	31. 35	18. 41	·1332					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 4		Mar. 4						
h m	° ′ ″	h m		h m		h m	°	°
21. 42	20. 31. 5	18. 46	·1327					
22. 11	31. 30	19. 6	·1335					
22. 24	32. 30	19. 27	·1328					
22. 40	32. 20	19. 35	·1329					
23. 7	34. 30		***					
23. 15	33. 30	20. 5	·1323					
23. 34	34. 20	20. 19	·1327					
23. 52	35. 0	20 51	·1315					
23. 59	36. 35	21. 20	·1320					
		21. 41	·1314					
		22. 15	·1317					
		22. 27	·1308					
		23. 0	·1317					
		23. 8	·1307					
		23. 59	·1311					
Mar. 5		Mar. 5		Mar. 5		Mar. 5		
0. 0	20. 36. 40	0. 0	·1311		(†)	1. 0	56·3	59·0
0. 14	39. 0	0. 19	·1317	0. 46	·03210	Max.	57·5	60·2
0. 45	35. 0	0. 45	·1298	1. 19	·03230	9. 0	57·0	59·1
0. 56	36. 15	1. 14	·1306	1. 33	·03230	Min.	56·2	57·9
1. 18	36. 0	1. 33	·1316	2. 37	·03280	21. 0	56·5	58·0
1. 34	39. 35	2. 10	·1300	4. 36	·03300			
	***	2. 43	·1301	5. 19	·03327			
2. 53	37. 0		***	8. 56	·03340			
3. 25	35. 25	3. 37	·1310	15. 19	·03318			
3. 44	36. 10	3. 54	·1309	19. 48	·03300			
4. 41	34. 0	4. 4	·1305	23. 59	·03310			
5. 22	33. 30	4. 26	·1307					
5. 38	34. 0	4. 38	·1302					
5. 44	33. 25	4. 49	·1301					
6. 0	29. 55	5. 36	·1309					
6. 26	29. 55	5. 48	·1304					
6. 47	28. 0	6. 1	·1305					
7. 0	28. 25	6. 31	·1314					
7. 11	28. 10	6. 39	·1310					
7. 26	29. 55	6. 55	·1313					
7. 40	29. 35	7. 4	·1310					
7. 42	27. 30	7. 18	·1315					
8. 0	25. 40	7. 35	·1308					
8. 17	27. 0	7. 56	·1308					
9. 18	33. 25	8. 26	·1317					
12. 58	32. 0	8. 42	·1313					
13. 41	32. 20	9. 11	·1318					
14. 2	33. 15	9. 22	·1314					
14. 38	30. 50	9. 49	·1316					
14. 53	30. 50	11. 49	·1312					
15. 26	32. 25	12. 10	·1317					
16. 3	30. 30	12. 53	·1311					
16. 30	30. 45	13. 3	·1318					
16. 56	31. 0	13. 12	·1314					
17. 13	31. 5	13. 39	·1314					
17. 33	31. 30	14. 20	·1322					
18. 4	36. 0	15. 15	·1313					
18. 33	35. 55	15. 53	·1319					
18. 39	35. 10	16. 26	·1316					
18. 56	32. 40	16. 59	·1320					
	***	17. 39	·1316					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 5		Mar. 5						
h m	° ′ ″	h m		h m		h m	°	°
19. 24	20. 32. 10	17. 51	·1309					
19. 27	33. 5	18. 41	·1323					
19. 39	33. 30		***					
19. 59	31. 50	19. 44	·1328					
20. 26	32. 30	20. 0	·1318					
20. 38	31. 45	20. 27	·1324					
21. 33	31. 40	20. 42	·1317					
22. 4	33. 5	21. 4	·1314					
22. 52	34. 0	21. 26	·1315					
23. 26	34. 50	21. 43	·1310					
23. 59	36. 55	21. 58	·1316					
		22. 15	·1309					
		23. 31	·1303					
			(†)					
Mar. 6		Mar. 6		Mar. 6		Mar. 6		
0. 0	20. 36. 55		(†)	0. 0	·03310	1. 0	56·8	59·1
0. 9	36. 20	0. 10	·1304	3. 10	·03340	3. 0	56·3	59·0
0. 23	36. 5	0. 47	·1310	4. 0	·03350	Max.	57·1	59·4
0. 39	37. 10	0. 55	·1305	4. 17	·03343	9. 0	56·8	59·0
0. 48	38. 5	1. 33	·1307	4. 53	·03340	Min.	55·5	57·5
0. 56	37. 0	1. 49	·1313	5. 25	·03353	21. 0	55·8	57·8
1. 39	37. 5	3. 51	·1316	5. 52	·03340			
1. 54	37. 35	4. 11	·1316	6. 25	·03350			
3. 28	35. 15	4. 36	·1307	6. 40	·03340			
3. 54	34. 30	4. 49	·1310	8. 41	·03330			
4. 56	31. 45	5. 4	·1304	17. 42	·03300			
5. 10	29. 10	5. 33	·1316	18. 10	·03290			
5. 36	30. 45	5. 44	·1311	18. 41	·03300			
5. 54	28. 35	5. 53	·1314	19. 40	·03310			
5. 59	28. 40	6. 11	·1306	22. 13	·03290			
6. 19	27. 30	6. 32:	·1317	23. 59	·03290			
6. 43	30. 0	6. 46	·1311					
7. 4	26. 10	7. 2	·1316					
7. 53	32. 15	8. 34	·1317					
8. 38	31. 40	8. 42	·1315					
8. 53	30. 15	10. 0	·1315					
9. 26	32. 10	10. 20	·1322					
10. 21	32. 10	10. 47	·1314					
10. 38	30. 55	11. 40	·1319					
10. 59	31. 35	12. 16	·1312					
11. 24	32. 15	12. 53	·1317					
11. 53	30. 55	13. 41	·1314					
13. 39	31. 30	13. 52	·1319					
13. 55	32. 5	14. 7	·1314					
14. 10	30. 55	14. 46	·1319					
14. 24	31. 50	14. 56	·1315					
14. 56	30. 45	17. 15	·1327					
15. 10	31. 45	17. 41	·1333					
	***	18. 10	·1320					
16. 27	31. 30	18. 30	·1312					
	***	19. 10	·1317					
17. 4	31. 20	19. 19	·1315					
	***	19. 37	·1320					
17. 41	36. 25	19. 56	·1320					
17. 51	34. 10	20. 16	·1313					
17. 54	34. 30	21. 11	·1308					
18. 14	30. 35	21. 55	·1303					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 6		Mar. 6						
h m	° ′ ″	h m		h m		h m	°	°
18. 33	20 31. 55	22. 39	·1304					
18. 54	31. 30	23. 14	·1309					
19. 16	31. 55	23. 44	·1303					
19. 31	31. 0	23. 59	·1308					
20. 11	31. 35							
20. 34	30. 30							
21. 3	30. 30							
21. 54	32. 45							
22. 4	32. 0							
22. 41	32. 40							
22. 55	33. 30							
23. 11	34. 55							
23. 34	34. 30							
23. 59	36. 55							
Mar. 7		Mar. 7		Mar. 7		Mar. 7		
0. 0	20. 36. 55	0. 0	·1308	0. 0	·03290	1. 0	55·7	58·0
0. 40	37. 5	0. 32	·1305	2. 51	·03320	3. 0	55·7	58·9
0. 56	37. 5	0. 57	·1312	5. 37	·03340	Max.	56·7	59·0
1. 7	37. 45		***	7. 19	·03330	9. 0	55·8	57·9
1. 38	36. 55	1. 54	·1309	9. 22	·03340	Min.	55·5	56·0
1. 41	37. 10	2. 18	·1314	10. 29	·03300	21. 0	55·9	56·0
1. 55	36. 45	2. 30	·1311	12. 15	·03307			
2. 9	36. 30	2. 40	·1316	14. 0	·03300			
2. 24	36. 20	2. 47	·1312	14. 16	·03282			
2. 31	35. 50	3. 16	·1312	14. 37	·03280			
2. 41	36. 35	3. 26	·1304	15. 0	·03276			
3. 20	34. 30	3. 44	·1309	17. 24	·03290			
3. 45	34. 15	4. 22	·1302	20. 3	·03280			
4. 9	32. 55	4. 31	·1305	22. 11	·03270			
4. 33	33. 10	4. 43	·1299	23. 59	·03270			
4. 53	31. 5		***					
5. 11	31. 30	5. 36	·1314					
5. 28	31. 5	5. 43	·1310					
5. 40	32. 10	5. 52	·1312					
5. 44	32. 0	6. 5	·1305					
5. 57	33. 5	6. 15	·1306					
6. 11	32. 30	6. 47	·1318					
6. 26	33. 30	7. 2	·1313					
6. 36	32. 50	7. 50	·1307					
6. 54	33. 20	8. 0	·1309					
7. 4	33. 10	8. 16	·1316					
7. 41	34. 45	8. 28	·1312					
8. 11	30. 30	8. 56	·1317					
8. 27	32. 25	9. 22	·1333					
8. 41	32. 40	9. 44	·1322					
9. 15	30. 35	9. 56	·1326					
9. 24	29. 20	10. 10	·1316					
9. 31	31. 25	10. 18	·1316					
9. 41	32. 40	10. 28	·1320					
9. 54	30. 0	11. 57	·1314					
10. 11	33. 15	12. 20	·1317					
10. 26	31. 0	12. 43	·1312					
10. 46	33. 5	13. 26	·1308					
11. 9	32. 55	13. 40	·1317					
11. 31	33. 5	13. 54	·1311					
12. 14	31. 25	14. 16	·1327					
12. 26	31. 25	14. 23	·1324					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 7		Mar. 7						
h m	° ′ ″	h m		h m		h m	°	°
12. 39	20. 30. 25	14. 36	·1325					
12. 55	30. 25	14. 59	·1314					
13. 14	29. 40	15. 10	·1317					
13. 26	31. 50	16. 30	·1315					
13. 38	34. 50	16. 35	·1310					
13. 54	35. 35	16. 46	·1315					
14. 0	34. 30	17. 10	·1313					
14. 12	33. 30	17. 16	·1318					
14. 31	34. 35	17. 24	·1313					
14. 43	30. 0	18. 17	·1317					
15. 10	30. 0	18. 30	·1309					
15. 16	30. 35	18. 41	·1316					
15. 26	30. 35		***					
15. 44	30. 0	19. 23	·1308					
15. 52	30. 30	19. 48	·1313					
16. 0	29. 55	20. 6	·1302					
16. 10	30. 30		***					
16. 22	30. 0	21. 24	·1307					
16. 42	30. 0	21. 38	·1299					
16. 54	30. 35	22. 25	·1306					
17. 9	30. 55	22. 52	·1300					
17. 24	30. 40	23. 44	·1296					
17. 26	31. 45	23. 59	·1303					
17. 28	30. 55							
17. 34	30. 10							
17. 47	31. 20							
18. 11	30. 35							
18. 27	31. 30							
18. 38	30. 0							
	***							
19. 23	30. 55							
19. 39	29. 20							
19. 56	30. 0							
21. 5	30. 25							
21. 23	32. 0							
21. 27	31. 15							
21. 33	32. 5							
21. 40	31. 20							
21. 54	32. 20							
22. 14	33. 0							
22. 36	34. 30							
22. 53	34. 55							
23. 11	37. 0							
23. 23	37. 15							
23. 26	38. 20							
23. 38	37. 15							
23. 54	37. 15							
23. 59	38. 30							
Mar. 8		Mar. 8		Mar. 8		Mar. 8		
0. 0	20. 38. 30	0. 0	·1303	0. 0	·03270	1. 0	56 ·0	58 ·8
0. 15	39. 45	0. 40	·1304	2. 12	·03306	3. 0	56 ·3	59 ·0
0. 34	40. 5	0. 50	·1297	6. 57	·03313	Max.	56 ·3	59 ·0
0. 41	38. 10	1. 27	·1305	7. 30	·03320	9. 0	56 ·2	58 ·5
1. 23	38. 5	1. 33	·1303	10. 23	·03300	Min.	54 ·8	57 ·2
1. 34	37. 30	2. 0	·1309	10. 45	·03282	21. 0	55 ·4	57 ·4
1. 47	38. 15	2. 26	·1307	12. 21	·03290			
2. 4	37. 10	2. 42	·1313	13. 25	·03274			
Mar. 8		Mar. 8		Mar. 8				
h m	° ′ ″	h m		h m		h m	°	°
2. 10	20. 37. 25	2. 49	·1307	16. 32	·03280			
2. 17	36. 50	4. 30	·1311	23. 35	·03260			
2. 32	37. 30	4. 50	·1317	23. 59	·03290			
2. 56	36. 5	5. 8	·1313					
3. 26	35. 10	5. 25	·1317					
4. 30	32. 0	5. 34	·1312					
5. 6	31. 0	6. 2	·1315					
5. 27	31. 50	6. 14	·1318					
5. 42	31. 15	6. 36	·1315					
6. 6	31. 55	7. 1	·1299					
6. 10	30. 50	7. 12	·1313					
6. 38	31. 15	7. 18	·1307					
6. 50	30. 30	7. 29	·1313					
7. 6	21. 10	7. 46	·1303					
7. 9	23. 0	8. 30	·1309					
7. 27	27. 30	8. 46	·1301					
7. 39	29. 5	9. 16	·1310					
7. 50	28. 30	9. 27	·1309					
8. 15	30. 30	9. 42	·1317					
8. 38	30. 45	9. 50	·1315					
8. 49	30. 0	10. 10	·1323					
9. 44	31. 30	10. 30	·1329					
9. 56	32. 25	10. 57	·1316					
10. 6	32. 5	11. 7	·1319					
10. 23	33. 30	11. 25	·1313					
11. 34	30. 25	11. 40	·1317					
11. 49	31. 20	11. 50	·1312					
12. 15	33. 0	12. 24	·1318					
12. 30	32. 25	12. 33	·1314					
14. 23	32. 50	12. 57	·1318					
16. 46	31. 25	13. 22	·1310					
17. 32	32. 5	13. 53	·1314					
20. 0	30. 5	14. 42	·1310					
20. 27	29. 50		***					
20. 34	30. 30	16. 54	·1318					
20. 46	29. 35	17. 27	·1313					
20. 51	30. 10	19. 0	·1316					
21. 25	30. 5		***					
22. 30	32. 50	20. 11	·1312					
23. 30	36. 30	20. 27	·1307					
23. 59	37. 0	22. 54	·1300					
		23. 42	·1302					
		23. 59	·1305					
Mar. 9		Mar. 9		Mar. 9		Mar. 9		
0. 0	20. 37. 0	0. 0	·1305	0. 0	·03290	1. 0	55 ·7	58 ·7
0. 18	37. 0	0. 21	·1308	2. 6	·03300	3. 0	55 ·9	58 ·8
0. 30	38. 30	1. 37	·1307	7. 23	·03310	Max.	56 ·1	58 ·9
0. 39	38. 0	2. 15	·1315	9. 34	·03300	9. 0	55 ·9	58 ·6
0. 54	38. 55		***	18. 58	·03280	Min.	55 ·1	57 ·5
1. 55	38. 0	3. 0	·1311	21. 0	·03278	21. 0	55 ·4	57 ·9
2. 11	38. 30	4. 2	·1313	22. 24	·03256			
4. 4	34. 40	4. 14	·1318	23. 59	·03265			
4. 40	33. 35	4. 26	·1318					
4. 57	32. 0	4. 57	·1304					
5. 31	30. 40	5. 14	·1312					
5. 45	30. 50	5. 25	·1309					
5. 59	30. 0	5. 42	·1315					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 9		Mar. 9						
h m	° ′ ″	h m		h m		h m	°	°
6. 6	20. 30. 5	6. 18	·1309					
6. 19	28. 55	7. 7	·1317					
6. 31	29. 20	7. 45	·1313					
6. 58	31. 0	10. 25	·1317					
7. 13	32. 20	10. 43	·1322					
7. 41	32. 0	11. 6	·1316					
7. 59	31. 25	11. 19	·1318					
8. 24	31. 50	11. 26	·1314					
8. 38	31. 35	12. 15	·1313					
9. 9	31. 25	12. 29	·1317					
9. 24	30. 0	13. 23	·1313					
10. 3	30. 35	13. 45	·1319					
10. 18	29. 0	13. 48	·1316					
10. 41	29. 10	14. 56	·1312					
10. 58	30. 15	17. 45:	·1318					
11. 10	30. 15	21. 9	·1303					
11. 24	31. 20	22. 32	·1299					
11. 54	32. 5	23. 14	·1301					
12. 25	32. 30	23. 59	·1300					
12. 40	31. 35							
13. 2	32. 35							
13. 23	32. 30							
13. 41	33. 20							
14. 18	32. 0							
14. 48	31. 55							
15. 9	32. 5							
15. 38	33. 10							
15. 57	33. 20							
16. 11	32. 30							
19. 40	30. 35							
20. 39:	29. 50							
21. 37	30. 30							
23. 59	37. 55							
Mar. 10		Mar. 10		Mar. 10		Mar. 10		
0. 0	20. 37. 55	0. 0	·1300	0. 0	·03265	Min.	55 ·4	58 ·0
0. 40	38. 50	1. 4	·1307	0. 57	·03300	1. 0	55 ·4	58 ·6
1. 24	38. 30	5. 14	·1314	2. 19	·03320	3. 0	55 ·9	58 ·5
1. 43	38. 30	6. 3	·1314	2. 30	·03305	Max.	56 ·5	58 ·8
3. 4	37. 0	6. 20	·1309	9. 15	·03303	9. 0	55 ·9	58 ·0
4. 14	34. 30	7. 3	·1316	11. 6	·03292	21. 0	56 ·0	58 ·5
4. 36	33. 30	7. 11	·1314	13. 14	·03290			
5. 48	32. 25	8. 45	·1315	16. 0	·03275			
6. 0	32. 45	9. 10	·1319	19. 38	·03280			
6. 11	31. 30	9. 27	·1318	21. 8	·03270			
6. 33	30. 30	9. 39	·1322	22. 56	·03256			
8. 25	32. 30	9. 56	·1322	23. 59	·03260			
9. 9	31. 55	10. 12	·1318					
9. 24	31. 5	10. 28	·1321					
9. 39	31. 30	10. 42	·1317					
9. 56	30. 45	11. 47	·1318					
10. 12	31. 0	12. 8	·1314					
10. 38	29. 55	14. 15	·1321					
11. 0	30. 50	15. 14	·1316					
11. 24	30. 50	19. 43	·1320					
11. 38	31. 25	20. 20	·1315					
12. 50	31. 55	20. 36	·1315					
12. 53	32. 50	21. 23	·1303					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 10		Mar. 10						
h m	° ′ ″	h m		h m		h m	°	°
13. 10	20. 32. 55	21. 37	·1305					
13. 17	34. 20	22. 30	·1302					
13. 38	34. 0	22. 44	·1308					
13. 48	33. 30	23. 22	·1294					
13. 57	33. 55	23. 59	·1306					
14. 8	33. 30							
14. 23	33. 35							
14. 39	33. 5							
15. 6	32. 0							
17. 9	31. 15							
18. 49	30. 40							
20. 32	29. 45							
21. 10	30. 25							
21. 27	29. 50							
21. 45	31. 30							
22. 11	32. 25							
22. 30	33. 15							
22. 45	35. 30							
22. 58	36. 30							
23. 8	36. 25							
23. 18	37. 20							
23. 24	37. 10							
23. 59	40. 0							
Mar. 11		Mar. 11		Mar. 11		Mar. 11		
0. 0	20. 40. 0	0. 0	·1306	0. 0	·03260	1. 0	56 ·4	59 ·3
0. 26	38. 30	0. 27	·1305	3. 12	·03303	3. 0	56 ·9	59 ·0
0. 40	40. 5	0. 40	·1310	3. 25	·03310	Max.	56 ·9	59 ·3
0. 43	39. 0	0. 58	·1307	3. 51	·03300	9. 0	56 ·7	59 ·0
0. 55	38. 50	1. 38	·1315	5. 30	·03310	Min.	55 ·4	57 ·5
1. 23	39. 35	2. 0	·1311	12. 30	·03290	21. 55	55 ·5	58 ·0
1. 39	40. 55	3. 27	·1317	13. 51:	·03260			
1. 57	39. 35	3. 42	·1323	14. 18	·03270			
3. 27	37. 30	3. 54	·1311	15. 24	·03280			
3. 38	37. 40	5. 0	·1316	16. 30	·03290			
3. 44	36. 0	5. 56	·1316	21. 18	·03280			
4. 17	35. 40	6. 13	·1323	22. 42	·03250			
4. 38	35. 0		***	23. 59	·03240			
4. 56	34. 30	6. 35	·1319					
5. 30	32. 30	6. 56	·1325					
5. 45	33. 0	8. 17	·1317					
6. 16	32. 35	8. 25	·1320					
6. 44	32. 40	8. 41	·1313					
7. 8	31. 35	8. 57	·1321					
7. 45	32. 30	9. 30	·1314					
8. 10	32. 0		***					
8. 30	30. 5	10. 32	·1319					
8. 45	30. 10	10. 41	·1315					
9. 2	28. 30	11. 40	·1319					
9. 37	31. 25	11. 45	·1315					
10. 30	31. 10	11. 56	·1317					
11. 34	32. 30	12. 29	·1330					
11. 53	32. 10	12. 50	·1326					
12. 10	34. 20	13. 14	·1330					
12. 40	36. 25	13. 49	·1316					
12. 47	35. 35	14. 12	·1319					
12. 56	35. 50	14. 24	·1316					
13. 44	28. 55	15. 11	·1313					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.11		Mar.11						
h m	° ′ ″	h m		h m		h m	°	°
13.59	20.28.35	16.58	·1318					
14.17	32. 5	18.45	·1316					
15. 0	30.35	20.27	·1315					
16.59	31.30	20.54	·1308					
17. 4	31.25	21. 5	·1310					
19.11	31.45	21.25	·1305					
19.45	31.20	21.58	·1308					
	***	22.36	·1299					
20.41	30.25	23.59	·1305					
21. 4	29.30							
21.40	29.50							
22.41	33.10							
23. 1	35.20							
23.59	38.10							
Mar.12		Mar.12		Mar.12		Mar.12		
0. 0	20.38.10	0. 0	·1305	0. 0	·03240	1. 0	55·8	57·3
1. 1	38.45	1.30	·1315	1.18	·03275	Min.	55·0	57·0
1.24	40. 5	1.44	·1306	2. 0	·03280	9. 0	55·3	57·0
1.32	38.25	1.54	·1311	4.19	·03300	Max.	56·3	58·4
1.44	38. 5	2. 8	·1313	9. 5	·03290	21. 0	56·3	58·1
1.54	39. 0	2.25	·1306	9.37	·03277			
2. 3	39. 5	3.57	·1317	15.24	·03300			
2.23	37.40	6.30	·1319	21. 6	·03278			
2.38	37. 0	6.50	·1315	22.46	·03250			
2.54	37. 0	7. 8	·1318	23.59	·03270			
4.54	33.35	7.23	·1311					
5.39	33. 0	8. 6	·1324					
6.11	32.30	8.27	·1318					
7. 9	32.25	8.48	·1317					
7.31	28.50	9.12	·1324					
7.44	30. 0	9.45	·1314					
8. 3	27.55	10.40	·1322					
8.52	31.30	11.30	·1318					
9. 9	30. 5	18.48	·1316					
9.41	28.50	18.57	·1321					
10. 3	30. 0	19.14	·1316					
10.36	29.30	19.36	·1321					
11. 8	30.15	20. 7	·1312					
11.24	31. 5	20.40	·1314					
11.33	30.30	21.46:	·1304					
12.26	32.40	22.12	·1304					
15.24	32. 5	23.16	·1300					
15.54	31.45	23.59	·1303					
16.24	31.55							
16.51	31.20							
17.16	31.50							
18. 8	31.30							
18.32	30.35							
18.39	29.50							
18.52	30.30							
19. 4	29.30							
19.41	29.35							
20. 6	28.25							
21.40	29.30							
22.41	34. 5							
23.54	38.20							
23.59	38.20							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.13		Mar.13		Mar.13		Mar.13		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20.38.20	0. 0	·1303	0. 0	·03270	1. 0	56·5	59·0
0.18	39.30	0.53	·1309	2.57	·03300	3. 0	56·4	58·8
0.36	39.15	1. 3	·1314	9. 2	·03290	Max.	56·8	59·0
0.46	39.55	1.19	·1312	18.27	·03270	9. 0	56·7	58·5
0.55	39.45	1.47	·1316	21. 0	·03270	Min.	55·4	57·2
0.59	41. 0	3.16	·1316	23.11	·03240	21. 0	55·8	57·4
1.23	40.20	4.40	·1319	23.59	·03250			
1.48	40.35	4.52	·1316					
3. 5	37.30	5.14	·1319					
3.38	37. 0	6.57	·1318					
4.51	33.55	7.17	·1312					
6.23	33.35	7.40	·1316					
6.46	31.55	7.52	·1321					
6.56	31.50	8.21	·1316					
7.23	26. 5	8.56	·1322					
7.38	27. 0	9.17	·1317					
8.16	31.15	10.48	·1321					
9.10	30.55	12.43	·1319					
9.17	30.30	14. 7	·1322					
9.48	31.35	15.29	·1319					
11.30	32.10	17.19	·1322					
12.51	32.10	17.47	·1319					
12.58	32.35	19.40	·1319					
14. 9	32.30	22.16	·1296					
14.42	31.45	22.45	·1294					
15.11	31.50	23.59	·1301					
15.26	32.20							
16.23	32.20							
16.27	31.45							
16.41	32.50							
17.12	31.55							
17.25	32. 5							
17.33	31.55							
18. 0	32.50							
18.39	30.40							
19.13	29.50							
19.34	28.25							
19.51	28.45							
20.30	28. 0							
21.29	28.45							
22.44	32.10							
23.23	36. 0							
23.59	38. 0							
Mar.14		Mar.14		Mar.14		Mar.14		
0. 0	20.38. 0	0. 0	·1301	0. 0	·03250	1. 0	55·8	58·2
0.56	40.35	0.58	·1309	3.24	·03300	3. 0	56·0	58·8
1.11	40.35	1.11	·1306	5.38	·03290	Max.	56·6	59·1
1.25	39.30	1.52	·1313	8.45	·03300	9. 0	56·6	58·0
1.40	39.30	2.15	·1311	12.43	·03270	Min.	54·8	57·1
1.45	40. 5	3. 7	·1315	13. 8	·03210	21. 0	54·9	57·3
1.55	40.30	3.14	·1319	14.20	·03240			
3. 4	37.20	3.42	·1319	15.25	·03230			
3.17	37.40	4.18	·1323	17.41	·03236			
3.36	36.30	5.28	·1321	18. 1	·03225			
4.45	34. 0	6. 4	·1325	18.43	·03250			
6. 9	32.55	6.35	·1322	19.14	·03240			
6.48	32.55	6.42	·1325	20. 6	·03250			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 14		Mar. 14		Mar. 14				
h m	° ′ ″	h m		h m		h m	°	°
7. 11	20. 32. 25	7. 15	·1319	21. 19	·03246			
7. 39	32. 25	7. 36	·1318	21. 59	·03220			
8. 9	28. 30	8. 5	·1311	23. 59	·03230			
8. 25	30. 0	8. 32	·1315					
8. 38	30. 40	8. 38	·1322					
8. 41	32. 0	8. 49	·1318					
8. 56	32. 30	9. 39	·1325					
9. 23	30. 35	10. 1	·1321					
9. 44	31. 30	10. 9	·1324					
	***	10. 18	·1321					
11. 10	31. 0	10. 30	·1324					
11. 24	31. 35	10. 50	·1319					
11. 30	30. 50	11. 16	·1322					
11. 43	30. 45	11. 26	·1328					
12. 17	28. 10	11. 41	·1319					
12. 23	30. 0	11. 49	·1323					
12. 40	40. 50	12. 9	·1315					
12. 56	30. 30	12. 32	·1316					
13. 8	23. 40	12. 41	·1321					
13. 25	15. 35	12. 58	·1310					
13. 57	15. 15	13. 4	·1313					
14. 31	22. 55	13. 30	·1317					
14. 47	22. 30	13. 53	·1305					
15. 8	23. 0	14. 0	·1305					
15. 30	24. 30	15. 0	·1318					
15. 41	26. 15	15. 20	·1315					
16. 11	25. 0	15. 36	·1318					
16. 37	25. 0	15. 52	·1317					
16. 54	25. 30	16. 14	·1321					
17. 12	27. 20	17. 13	·1319					
17. 26	29. 10	17. 36	·1315					
17. 38	30. 30	17. 45	·1315					
17. 46	30. 40	18. 28	·1302					
17. 55	29. 30	18. 38	·1302					
18. 11	29. 0	18. 58	·1310					
18. 29	30. 5	19. 21	·1303					
18. 43	32. 35	20. 3	·1309					
19. 7	32. 30	21. 0	·1307					
19. 14	32. 30	21. 44	·1297					
19. 27	31. 15	21. 56	·1293					
19. 37	32. 0	22. 12	·1282					
19. 40	31. 30	22. 37:	·1277					
19. 54	32. 0	23. 17	·1285					
20. 1	33. 0	23. 59	·1286					
20. 11	33. 30							
20. 24	31. 55							
20. 39	33. 0							
20. 48	32. 0							
20. 54	32. 0							
21. 18	30. 35							
21. 33	30. 30							
21. 39	31. 45							
22. 9	33. 30							
	***							
22. 41	38. 20							
23. 7	39. 50							
23. 11	39. 50							
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 14								
h m	° ′ ″	h m		h m		h m	°	°
23. 43	20. 43. 5							
23. 59	43. 25							
Mar. 15		Mar. 15		Mar. 15		Mar. 15		
0. 0	20. 43. 25	0. 0	·1286	0. 0	·03230	1. 0	55·2	58·0
0. 13	42. 50	1. 45	·1305	7. 0	·03304	3. 0	55·5	57·8
0. 55	45. 10	2. 7	·1295	7. 13	·03295	Max.	56·0	58·2
1. 23	44. 35	2. 29	·1307	7. 35	·03320	9. 0	55·5	57·6
1. 47	44. 35	2. 36	·1308	7. 50	·03300	Min.	55·2	57·5
1. 59	42. 30	2. 41	·1315	8. 13	·03280	21. 0	55·8	57·5
2. 5	40. 25	3. 27	·1316	9. 33	·03280			
2. 24	40. 25	3. 40	·1312	9. 45	·03260			
2. 40	40. 45	3. 54	·1315	10. 6	·03222			
2. 47	41. 30	4. 13	·1307	12. 20	·03242			
2. 55	40. 25	4. 28	·1314	12. 47	·03233			
3. 18	40. 55	4. 42	·1315	13. 8	·03244			
3. 35	40. 0	5. 35	·1302	13. 40:	·03208			
3. 40	38. 10	6. 4	·1317	14. 2	·03200			
3. 53	37. 15	6. 14	·1310	14. 26	·03180			
3. 59	37. 30	6. 25	·1307	15. 23:	·03220			
4. 11	35. 50	6. 43	·1314	17. 56	·03240			
4. 38	37. 0	6. 55	·1296	19. 37	·03250			
4. 55	37. 10	7. 17	·1348	20. 45	·03240			
5. 11	36. 35	7. 34	·1322		(†)			
5. 18	37. 5	7. 52	·1302	21. 0	·03237*			
5. 31	36. 55	8. 6	·1305					
5. 45	33. 10	8. 17	·1299					
5. 58	33. 0	8. 32	·1305					
6. 19	33. 55	8. 45	·1300					
6. 25	33. 0	9. 16	·1304					
6. 34	33. 40	9. 38	·1351					
6. 39	33. 45	9. 51	·1321					
6. 43	34. 5	10. 14	·1310					
6. 57	34. 0	10. 25	·1315					
7. 8	27. 20	10. 38	·1310					
7. 19	7. 20	10. 47	·1313					
7. 39	24. 0	11. 13	·1303					
7. 55	27. 25	11. 20	·1306					
8. 3	27. 40	11. 40	·1301					
8. 13	24. 25	11. 51	·1304					
8. 31	27. 30	11. 57	·1301					
8. 39	27. 30	12. 7	·1307					
8. 54	29. 30	12. 16	·1307					
9. 10	28. 25	12. 35	·1300					
9. 32	30. 50	12. 51	·1304					
9. 43	24. 35	12. 57	·1317					
9. 55	29. 0	13. 4	·1320					
10. 6	25. 55	13. 9	·1318					
10. 12	27. 5	13. 29	·1339					
10. 31	23. 40	13. 39	·1339					
10. 43	25. 25	13. 52	·1347					
10. 53	24. 35	14. 30	·1302					
11. 1	24. 10	14. 38	·1302					
11. 10	25. 0	14. 57	·1310					
11. 26	24. 50	15. 14	·1303					
11. 33	25. 10	15. 43	·1309					
11. 56	23. 55	16. 4	·1306					
12. 3	25. 50	16. 19	·1312					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 15		Mar. 15						
h m	° ′ ″	h m		h m		h m	°	°
12. 16	20. 27. 10	16. 28	·1309					
12. 35	26. 0	16. 41	·1308					
12. 55:	26. 0	17. 14	·1315					
13. 9	32. 25	18. 22	·1303					
13. 25	26. 0	18. 29	·1305					
13. 36	25. 0	19. 34	·1309					
13. 48	22. 30	20. 11	·1299					
13. 56	27. 20	20. 40	·1302					
14. 14	27. 45	20. 43	·1297					
14. 25	24. 35	20. 49	·1304					
14. 42	23. 45	21. 8	·1296					
15. 8	29. 35	21. 25	·1294					
15. 31	32. 5	21. 34	·1299					
15. 52	30. 35	21. 41	·1293					
16. 8	28. 25	22. 6	·1296					
16. 16	29. 0	22. 29	·1294					
16. 23	30. 5	22. 40	·1287					
16. 29	29. 55	22. 48	·1293					
16. 39	29. 30	23. 18	·1295					
16. 49	28. 15	23. 46	·1302					
17. 41	28. 40		(†)					
18. 4	30. 30							
	***							
18. 58	28. 30							
19. 19	28. 50							
19. 26	30. 0							
19. 49	29. 15							
20. 3	29. 30							
20. 11	30. 10							
	***							
20. 34	30. 5							
20. 40	29. 5							
20. 49	30. 35							
21. 8	30. 35							
21. 24	31. 25							
21. 36	32. 50							
21. 40	32. 15							
22. 7	34. 50							
22. 26	34. 50							
22. 38	34. 0							
22. 41	33. 10							
22. 54	35. 40							
23. 1	37. 20							
23. 17	36. 30							
23. 25	36. 20							
23. 59	40. 30							
Mar. 16		Mar 16		Mar. 16		Mar. 16		
0. 0	20. 40. 30		(†)		(†)	1. 0	56 ·1	58 ·4
0. 16	38. 45	0. 6	·1307	1. 0	·03226*	Max.	56 ·3	58 ·5
0. 30	42. 5	0. 19	·1301	1. 24	·03240	3. 0	55 ·9	58 ·5
0. 54	44. 25	0. 30	·1311	2. 38	·03304	9. 0	55 ·9	58 ·0
1. 7	44. 15	0. 51	·1314	2. 52	·03290	Min.	55 ·1	56 ·7
1. 30	46. 20	1. 30	·1300	3. 54	·03300	21. 0	55 ·4	57 ·0
1. 39	45. 30	1. 49	·1287	5. 6	·03320			
1. 48	44. 30	2. 16	·1306	5. 31	·03340			
1. 59	43. 30	2. 26	·1304	5. 45	·03330			
2. 19	44. 45	3. 1	·1315	6. 18	·03340			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 16		Mar. 16		Mar. 16				
h m	° ′ ″	h m		h m		h m	°	°
2. 45	20. 40. 15	3. 12	·1310	6. 53	·03330			
2. 55	40. 15	3. 35	·1317	7. 22	·03340			
3. 10	38. 0	4. 2	·1313	10. 42	·03290			
3. 19	38. 40	4. 30	·1318	10. 57	·03305			
3. 24	38. 10	4. 48	·1315	11. 31	·03240			
3. 36	38. 25	5. 9	·1305	12. 7	·03230			
3. 45	38. 0	5. 24	·1319	12. 43:	·03262			
3. 56	38. 30	5. 45	·1303	13. 25	·03270			
4. 19	37. 10	5. 58	·1301	15. 3	·03268			
4. 25	37. 40	6. 6	·1305	15. 38	·03260			
4. 36	37. 0	6. 10	·1302	17. 4	·03280			
4. 44	37. 30	6. 24	·1306	18. 37	·03270			
4. 56	35. 45	6. 44	·1296	19. 0	·03269			
5. 10	29. 5	6. 49	·1295	20. 33	·03260			
5. 16	28. 55	6. 55	·1292	21. 7	·03266			
5. 36	33. 10	7. 31	·1307	23. 15	·03250			
5. 46	30. 25	7. 46	·1303	23. 59	·03260			
5. 56	29. 0	8. 19	·1304					
6. 23	30. 30	8. 30	·1309					
6. 28	33. 25	8. 48	·1304					
6. 38	34. 30	9. 0	·1314					
6. 56	31. 50	9. 23	·1307					
7. 9	31. 50	9. 36	·1306					
7. 38	32. 55	9. 47	·1299					
8. 9	31. 20	10. 21	·1306					
8. 28	31. 30	10. 31	·1313					
8. 42	32. 45	10. 49	·1310					
9. 0	29. 30	11. 8	·1352					
9. 12	31. 0	11. 34	·1317					
9. 23	30. 30	11. 40	·1319					
9. 31	30. 50	12. 15	·1297					
9. 51	29. 35	12. 28	·1306					
10. 5	29. 35	12. 42	·1307					
10. 16	30. 30	12. 51	·1311					
10. 38	32. 40	13. 16	·1308					
10. 54	30. 0	13. 26	·1303					
11. 6	37. 20	13. 37	·1307					
11. 13	37. 15	14. 0	·1304					
11. 31	31. 40	14. 24	·1304					
11. 41	32. 15	14. 38	·1300					
11. 54	31. 0	14. 49	·1301					
12. 30	24. 40	15. 0	·1297					
12. 39	28. 45	15. 27:	·1307					
12. 52	29. 30	15. 50	·1302					
13. 24	28. 10	16. 25	·1304					
13. 47	29. 25	16. 35	·1303					
14. 11	27. 40	17. 10	·1310					
14. 30	27. 40	17. 19	·1307					
14. 46	29. 30	17. 56	·1313					
15. 19	30. 25	18. 28	·1308					
15. 28	29. 5		***					
15. 56	28. 30	19. 11	·1312					
16. 9	30. 10	19. 30	·1311					
16. 23	29. 10	19. 46	·1307					
17. 0	32. 15	20. 33	·1289					
17. 19	32. 35	21. 24	·1298					
17. 36	31. 5	21. 38	·1294					
17. 40	31. 20	21. 55	·1300					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.16		Mar.16						
h m	° ′ ″	h m		h m		h m	°	°
17. 49	20. 30. 45	22. 4	·1296					
17. 56	31. 5	22. 13	·1291					
18. 37	30. 0	22. 51	·1288					
	***	23. 4	·1292					
19. 7	29. 50	23. 19	·1288					
19. 25	28. 45	23. 59	·1295					
19. 44	28. 25							
19. 49	29. 35							
19. 54	29. 15							
20. 14	29. 20							
20. 25	31. 0							
20. 30	32. 30							
20. 33	31. 35							
20. 56	32. 25							
21. 8	31. 30							
21. 24	33. 25							
21. 31	33. 15							
21. 38	33. 45							
21. 40	32. 20							
21. 55	35. 50							
22. 8	36. 20							
22. 46	36. 10							
23. 38	38. 15							
23. 41	35. 20							
	***							
23. 59	36. 25							
Mar.17		Mar.17		Mar.17		Mar.17		
0. 0	20. 36. 25	0. 0	·1295	0. 0	·03260	1. 0	55 ·8	58 ·0
0. 8	36. 25	0. 38	·1305	0. 53	·03257	3. 0	55 ·7	58 ·0
0. 21	38. 5	0. 48	·1304	1. 24	·03270	Max.	56 ·1	58 ·8
0. 53	36. 0	1. 17	·1315	1. 53	·03266	9. 0	55 ·8	58 ·c
1. 9	36. 50	1. 40	·1310	2. 25	·03293	Min.	54 ·7	57 ·0
1. 22	40. 0	1. 52	·1303	4. 32	·03300	21. 0	54 ·8	57 ·0
1. 40	41. 5	2. 14	·1312	5. 26	·03330			
1. 49	40. 35	2. 27	·1306	5. 54	·03340			
2. 7	39. 10	2. 49	·1304	6. 4	·03333			
2. 16	39. 35	3. 8	·1313	6. 15	·03357			
2. 38	38. 5	3. 36	·1308	6. 30	·03360			
2. 41	37. 20	3. 56	·1316	6. 43	·03350			
2. 55	37. 10	4. 10	·1313	7. 0	·03360			
3. 7	38. 30	4. 50	·1325	8. 11	·03330			
3. 36	36. 5	4. 58	·1320	8. 32	·03317			
3. 51	35. 35	5. 3	·1320	8. 50	·03320			
4. 8	34. 20	5. 21	·1309	9. 4	·03300			
5. 4	34. 40	5. 37	·1307	10. 26	·03280			
5. 12	34. 15	5. 51	·1311	10. 55	·03290			
5. 23	34. 25	6. 8	·1297	12. 30	·03280			
5. 38	32. 5		***	13. 40	·03260			
5. 48	32. 30	6. 35	·1303	14. 26	·03250			
5. 57	30. 30	6. 42	·1294	15. 39	·03270			
6. 11	25 0	6. 53	·1306	19. 55	·03260			
6. 23	24. 0	7. 2	·1302	20. 41	·03250			
6. 28	25. 15	7. 10	·1306	22. 15	·03230			
6. 39	25. 25	7. 20	·1302	23. 59	·03230			
6. 45	22. 35	7. 43	·1307					
6. 56	25. 25	7. 49	·1312					
7. 7	24. 45	7. 57	·1307					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.17		Mar.17						
h m	° ′ ″	h m		h m		h m	°	°
7. 15	20. 27. 0	8. 12	·1320					
7. 24	28. 30	8. 23	·1306					
7. 38	29. 35	8. 44	·1299					
7. 46	28. 15	9. 2	·1314					
7. 56	29. 45	9. 11	·1311					
8. 9	27. 30	9. 20	·1316					
8. 16	29. 55	9. 30	·1311					
8. 24	29. 20	9. 54	·1312					
8. 30	28. 15	10. 3	·1318					
8. 39	29. 30	10. 24	·1307					
8. 48	26. 0	10. 33	·1306					
9. 1	29. 0	10. 52	·1314					
9. 12	29. 0	11. 6	·1307					
9. 28	30. 0	11. 16	·1313					
9. 43	27. 0	11. 42	·1311					
9. 56	26. 25	11. 49	·1314					
10. 14	27. 30	12. 2	·1308					
10. 31	24. 55	12. 8	·1311					
10. 38	24. 50	12. 33	·1313					
10. 54	25. 30	12. 45	·1308					
11. 5	27. 5	12. 54	·1310					
11. 13	26. 0	13. 7	·1307					
11. 34	28. 0	13. 41	·1311					
12. 25	29. 30	14. 4	·1316					
12. 38	28. 30	14. 42	·1309					
12. 46	28. 30	14. 55	·1312					
13. 11	29. 50	15. 28	·1308					
13. 23	29. 35	16. 29	·1312					
13. 33	30. 30	17. 56	·1304					
13. 56	34. 0	18. 37	·1312					
14. 31	29. 30	19. 24	·1305					
14. 53	29. 0	19. 51	·1309					
15. 10	26. 50	20. 16	·1304					
15. 31	26. 50	20. 22	·1311					
15. 57	29. 10	20. 39	·1305					
16. 18	28. 30	20. 58	·1313					
16. 24	28. 45	21. 52	·1302					
16. 46	26. 25	22. 3	·1306					
17. 18	27. 30	22. 14	·1300					
17. 32	27. 5	22. 28	·1301					
17. 54	29. 0	22. 34	·1298					
18. 54	27. 0	23. 0	·1307					
19. 7	27. 55	23. 15	·1304					
19. 12	27. 30	23. 59	·1304					
19. 23	28. 5							
19. 30	28. 5							
19. 40	27. 25							
19. 43	28. 15							
20. 10	28. 10							
20. 18	27. 0							
20. 30	28. 10							
20. 41	27. 10							
21. 0	29. 35							
21. 48	30. 5							
22. 0	31. 20							
22. 8	31. 20							
22. 25	31. 55							
22. 41	31. 10							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 17								
h m	° ′ ″	h m		h m		h m	°	°
22. 49	20. 32. 0							
22. 56	33. 10							
23. 4	32. 30							
23. 28	33. 30							
23. 36	32. 25							
23. 43	33. 30							
23. 51	32. 45							
23. 59	33. 10							
Mar. 18		Mar. 18		Mar. 18		Mar. 18		
0. 0	20. 33. 10	0. 0	·1304	0. 0	·03230	1. 0	55·4	57·8
0. 14	34. 35	0. 22	·1310	0. 41	·03226	Max.	55·5	58·0
0. 24	36. 5	1. 0	·1302	2. 41	·03260	3. 0	55·5	58·0
0. 49	35. 25	1. 43	·1299	6. 30	·03290	9. 0	55·2	57·5
0. 58	36. 0	2. 16	·1308	6. 53	·03280	Min.	53·5	55·9
1. 18	37. 25	2. 23	·1316	7. 11	·03290	22. 15	54·2	56·6
1. 35	37. 5	2. 41	·1305	9. 34:	·03246			
1. 40	35. 55	2. 57	·1313	11. 53	·03225			
2. 2	37. 5	3. 24	·1310	12. 3	·03230			
2. 12	36. 30	3. 56	·1314	12. 30	·03217			
2. 24	37. 35	4. 37	·1310	13. 41	·03210			
2. 31	36. 0	5. 11	·1313	14. 52	·03196			
2. 48	33. 50	5. 26	·1309	18. 37	·03201			
2. 54	34. 10	5. 37	·1316	21. 3	·03180			
3. 26	33. 30	5. 43	·1312	23. 11	·03150			
3. 56	33. 35	5. 54	·1312	23. 59	·03125			
4. 13	33. 0	6. 12	·1303					
4. 39	32. 15		***					
5. 0	30. 30	6. 36	·1311					
5. 8	30. 30	6. 57	·1293					
5. 26	26. 0	7. 5	·1302					
5. 38	27. 30	7. 18	·1302					
5. 46	26. 0	7. 41	·1310					
6. 0	26. 55	8. 15	·1307					
6. 16	23. 0	8. 39	·1308					
6. 25	23. 0	10. 25	·1316					
6. 40	25. 40	11. 21	·1315					
6. 55	23. 35	11. 40	·1312					
7. 7	20. 15	11. 57	·1319					
7. 23	26. 0	12. 50	·1313					
7. 47	29. 15	13. 17:	·1317					
7. 54	29. 10	13. 50	·1308					
8. 7	30. 25	14. 12	·1317					
8. 18	30. 40	14. 41	·1312					
8. 27	30. 10	16. 26	·1313					
10. 27	30. 10	16. 49	·1317					
10. 41	28. 50	17. 36	·1313					
11. 24	29. 35	18. 21	·1316					
11. 35	28. 15	21. 53	·1306					
11. 46	28. 15	23. 59	·1300					
12. 2	31. 30							
12. 34	29. 20							
13. 0	30. 20							
13. 35	28. 0							
13. 43	30. 5							
13. 54	30. 10							
14. 12	32. 5							
14. 30	31. 35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 18								
h m	° ′ ″	h m		h m		h m	°	°
14. 40	20. 32. 0							
14. 56	30. 20							
15. 28	29. 0							
17. 8	28. 30							
17. 45	28. 30							
18. 40	28. 0							
19. 49	27. 40							
20. 7	27. 30							
20. 19	27. 10							
21. 18	28. 5							
	***							
23. 8	33. 30							
23. 26	35. 15							
	***							
23. 59	35. 25							
Mar. 19		Mar. 19		Mar. 19		Mar. 19		
0. 0	20. 35. 25	0. 0	·1300	0. 0	·03125	1. 0	53·9	55·9
1. 41	36. 25	0. 12	·1298	1. 8	·03120	Max.	53·9	56·2
5. 38	31. 0	1. 30	·1308	4. 26:	·03160	7. 0	53·9	56·2
6. 37	30. 40	2. 22	·1311	8. 0	·03138	Min.	51·2	52·8
7. 4	29. 25	3. 34	·1313	10. 23	·03125	21. 0	51·8	52·9
7. 23	30. 5	4. 25	·1315	10. 31	·03132			
8. 24	30. 5	5. 23	·1313	10. 54	·03110			
8. 36:	29. 35	6. 35	·1319	13. 10	·03112			
8. 55	30. 20	6. 58	·1317	13. 39	·03100			
10. 8	29. 55	7. 15	·1321	20. 42	·03047			
10. 12	31. 0	8. 12	·1318	22. 23	·03010			
10. 34	29. 35	8. 39	·1321	22. 41	·03020			
10. 41	30. 40	8. 47	·1319	23. 33	·03017			
10. 59	28. 5	10. 12	·1317		(†)			
11. 14	28. 0	10. 29	·1335					
11. 32	26. 40	10. 47	·1325					
12. 4	27. 20	10. 57	·1325					
12. 40	27. 20	11. 31	·1317					
13. 11	28. 55	12. 34	·1314					
13. 29	27. 20	12. 56	·1321					
13. 53	27. 20	13. 55	·1317					
14. 4	27. 0	14. 5	·1321					
14. 10	27. 30	14. 15	·1316					
14. 22	27. 0	14. 24	·1318					
14. 26	27. 45	14. 46	·1313					
14. 38	26. 55	15. 47	·1321					
15. 0	28. 0	15. 57	·1314					
15. 22	26. 30	16. 3	·1318					
15. 38	25. 50	16. 12	·1319					
15. 47	26. 30	16. 35	·1312					
15. 58	25. 55	17. 7	·1308					
16. 8	27. 0	17. 13	·1312					
16. 34	25. 15	17. 48	·1313					
16. 48	26. 20	18. 19	·1320					
16. 57	26. 20	18. 45	·1317					
17. 8	25. 50	19. 16	·1323					
17. 22	26. 10	21. 4	·1307					
17. 33	25. 50	21. 14	·1314					
17. 47	26. 25	22. 20	·1298					
18. 4	26. 5	22. 38	·1304					
18. 31	27. 30	23. 19	·1308					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 19		Mar. 19						
h m	° ′ ″	h m		h m		h m	°	°
18. 54	20. 28. 0	23. 40	·1300					
19. 23	28. 40	23. 59	·1300					
20. 8	28. 35							
20. 33	28. 45							
20. 40	28. 30							
21. 32	29. 5							
22. 16	33. 10							
22. 34	35. 40							
23. 24	39. 0							
23. 41	40. 10							
23. 47	40. 55							
23. 59	40. 10							
Mar. 20		Mar. 20		Mar. 20		Mar. 20		
0. 0	20. 40. 10	0. 0	·1300		(†)	1. 0	52·0	55·0
0. 11	39. 10	0. 20	·1310	1. 0	·03027*	3. 0	52·5	56·0
0. 25	40. 0	0. 47	·1318	1. 24	·03060	Max.	52·8	56·0
0. 43	44. 40	1. 12	·1292	2. 11	·03065	9. 0	52·6	55·4
0. 51	43. 30	1. 29	·1293	2. 23	·03080	Min.	51·7	53·8
1. 7	44. 45	2. 4	·1310	2. 26	·03075	21. 0	52·5	54·5
1. 31	43. 20	2. 15	·1309	2. 54	·03105			
2. 0	49. 0	2. 25	·1299	3. 29	·03122			
2. 8	49. 35	2. 35	·1306	5. 6	·03117			
2. 17	52. 40	2. 40	·1294	5. 43:	·03116			
2. 24	51. 50	2. 56	·1305	6. 25	·03157			
2. 34	53. 55	3. 17	·1290		***			
2. 42	47. 35	3. 43	·1317	7. 4	·03160			
2. 53	47. 35	3. 56	·1317	7. 13	·03140			
2. 56	48. 10	4. 29	·1297	7. 22	·03150			
3. 4	45. 50	4. 43	·1304	7. 40	·03075			
3. 21	37. 35	4. 55	·1301	7. 54	·03065			
3. 38	38. 55	5. 12	·1309	8. 23	·03010			
3. 53	42. 0	5. 18	·1305	8. 55	·03060			
4. 8	41. 25	5. 33	·1309	9. 3	·03050			
4. 24	42. 10	5. 44	·1305	9. 25	·03080			
4. 35	39. 25	5. 47	·1308	10. 15	·03080			
4. 41	39. 35	5. 56	·1309	10. 39	·03040			
5. 4	37. 0	6. 13	·1296	11. 12	·02990			
5. 33	36. 5	6. 25	·1302	11. 46:	·03020			
5. 41	34. 25	6. 41	·1297	12. 15	·02990			
5. 55	33. 30	6. 47	·1304	13. 26	·02990			
6. 2	31. 55	6. 55	·1301	13. 33	·02980			
6. 8	31. 45	6. 57	·1308	13. 54	·02980			
6. 17	29. 0	7. 3	·1296	14. 0	·02990			
6. 38	30. 50	7. 14	·1336	14. 20	·02950			
6. 41	29. 30	7. 24	·1336	15. 25	·02970			
6. 48	32. 0	7. 32	·1291	15. 45	·02945			
7. 2	32. 55	7. 50	·1341	16. 12	·02930			
7. 8	21. 0	8. 11:	·1323	16. 56	·02980			
7. 12	16. 35	8. 21	·1269	17. 16	·02980			
7. 18	20. 5	8. 30	·1287	17. 40	·03012			
7. 28	32. 30	8. 41	·1279	18. 14	·03010			
7. 34	16. 20	8. 50	·1283	20. 8	·03016			
7. 40	8. 25	8. 56	·1277	21. 7	·03007			
7. 57	19. 55	9. 21	·1298	21. 53	·02990			
8. 16	35. 0	9. 48	·1299	23. 19	·03000			
8. 29	22. 40	10. 2	·1306	23. 59	·02990			
8. 39	29. 5	10. 11	·1304					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 20		Mar. 20						
h m	° ′ ″	h m		h m		h m	°	°
8. 50	20. 26. 30	10. 24	·1319					
8. 55	26. 45	10. 30	·1317					
9. 8	19. 5	10. 41	·1321					
9. 16	19. 5	10. 46	·1316					
9. 39	25. 25	10. 54	·1317					
9. 55	26. 5	11. 13	·1289					
10. 9	29. 10	11. 44	·1330					
10. 24	22. 0	12. 11	·1306					
	***	12. 34	·1295					
10. 51	22. 0	12. 44	·1295					
11. 5	29. 5	12. 56	·1290					
11. 16	19. 30	13. 10	·1291					
11. 29	14. 0	13. 22	·1286					
11. 48	22. 30	13. 36	·1295					
11. 58	22. 45	13. 46	·1294					
12. 8	20. 30	14. 3	·1319					
12. 31	19. 20	14. 19	·1306					
12. 35	17. 30	14. 31	·1308					
12. 51	17. 30	14. 52	·1292					
12. 57	19. 20	15. 11	·1290					
13. 10	22. 0	15. 30	·1303					
13. 23	22. 40	15. 43	·1305					
13. 35	27. 30	16. 3	·1293					
13. 47	28. 55	16. 18	·1280					
13. 56	31. 10	16. 45	·1297					
14. 17	24. 30	16. 59	·1294					
14. 53	31. 30	17. 12	·1290					
	***	17. 30	·1295					
15. 24	32. 0	17. 54	·1300					
15. 29	30. 35	18. 5	·1296					
15. 39	30. 35	18. 18	·1303					
15. 46	28. 20	18. 29	·1300					
15. 51	28. 20	18. 47	·1303					
15. 56	26. 30	18. 59	·1298					
16. 8	26. 30	19. 6	·1300					
16. 22:	25. 5	19. 14	·1295					
16. 44	32. 5	19. 25	·1294					
16. 51	31. 55	20. 0	·1300					
17. 7	27. 25	20. 26	·1291					
17. 16	27. 0	20. 57	·1293					
17. 32	27. 0	21. 23	·1287					
17. 52	29. 15	21. 35	·1291					
17. 59	28. 25	21. 52	·1284					
18. 8	27. 15		***					
18. 17	28. 50	22. 42	·1276					
18. 31	26. 50	23. 0	·1278					
18. 52	26. 25	23. 24	·1287					
18. 59	25. 30	23. 32	·1285					
19. 11	27. 20	23. 49	·1290					
19. 23	27. 20	23. 59	·1289					
19. 34	25. 35							
19. 38	26. 50							
19. 47	26. 0							
20. 0	28. 0							
20. 10	28. 25							
20. 18	29. 35							
20. 36	28. 55							
21. 23	30. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.20								
h m	° ′ ″	h m		h m		h m	°	°
21. 38	20. 32. 35							
21. 49	32. 35							
21. 53	34. 0							
22. 10	33. 0							
22. 25	34. 35							
22. 31	34. 15							
22. 57	35. 30							
23. 6	37. 10							
23. 11	37. 5							
23. 43	39. 0							
23. 54	39. 25							
23. 59	37. 30							
Mar.21		Mar.21		Mar.21		Mar.21		
0. 0	20. 37. 30	0. 0	·1289	0. 0	·02990	Min.	52 ·4	55 ·4
0. 10	36. 30	0. 4	·1288	4. 34	·03100	1. 0	52 ·4	55 ·5
0. 17	37. 30	0. 50	·1305	5. 34	·03110	3. 0	52 ·5	56 ·4
0. 38	35. 30	1. 0	·1304	7. 14	·03106	Max.	53 ·8	56 ·6
0. 58	36. 5	1. 36	·1326	8. 52	·03105	9. 0	53 ·5	55 ·6
1. 16	35. 30	1. 50	·1318	9. 45	·03070	21. 0	53 ·1	55 ·9
1. 26	36. 25	2. 5	·1319	10. 4	·03080			
1. 33	38. 30	2. 15	·1313	10. 39:	·03067			
1. 40	39. 0		***	11. 7	·03076			
1. 56	38. 5	2. 42	·1319	11. 38	·03080			
2. 4	39. 10	2. 56	·1306	12. 8	·03040			
2. 12	37. 25	3. 43	·1319	13. 4	·03070			
2. 17	38. 5	4. 19	·1310	14. 27	·03089			
2. 23	37. 15	5. 19	·1322	20. 41	·03080			
2. 29	37. 15	5. 30	·1315	22. 25	·03070			
2. 38	38. 5	5. 38	·1321	23. 59	·03050			
3. 4	34. 25	5. 50	·1325					
3. 35	34. 15	6. 6	·1318					
3. 58	34. 55	6. 13	·1322					
4. 13	32. 0	6. 43	·1321					
4. 39	30. 45	7. 2	·1326					
5. 23	30. 45	7. 19	·1321					
5. 31	29. 0	7. 40	·1321					
5. 50	30. 30	7. 57	·1326					
6. 11	30. 0	8. 11	·1324					
6. 32	30. 30	8. 19	·1332					
6. 40	31. 0	8. 29	·1329					
7. 1	30. 40	8. 36	·1331					
7. 11	30. 0	8. 48	·1322					
7. 25	29. 10	8. 58	·1331					
7. 34	30. 0	9. 5	·1328					
7. 47	29. 50	9. 26	·1340					
8. 5	29. 50	10. 4	·1319					
8. 10	30. 20	10. 22	·1322					
8. 23	26. 0	10. 45	·1343					
8. 39	29. 25	11. 3	·1334					
8. 51	32. 15	11. 13	·1334					
9. 4	32. 15	11. 42	·1310					
9. 23	25. 30	12. 12	·1317					
9. 26	24. 30	12. 32	·1312					
9. 51	28. 50	12. 47	·1314					
10. 1	28. 55	13. 6	·1310					
10. 9	28. 0	13. 16	·1311					
10. 33	28. 0	13. 38	·1318					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.21		Mar.21						
h m	° ′ ″	h m		h m		h m	°	°
10. 56	20. 30. 5	13. 58	·1312					
11. 23	26. 25	14. 46	·1316					
11. 29	26. 30	15. 44	·1316					
11. 35	26. 0	16. 33	·1321					
11. 39	25. 5	17. 4	·1319					
11. 40	24. 10	18. 6	·1325					
12. 12	20. 0	19. 17	·1320					
12. 29	23. 30	20. 0	·1314					
12. 52	27. 20	21. 1	·1307					
13. 26	28. 5	21. 12	·1294					
13. 37	28. 55	22. 4	·1290					
13. 56	26. 55		***					
14. 25	29. 5	23. 30	·1293					
15. 16	26. 10	23. 59	·1296					
15. 45	28. 45							
16. 24	28. 45							
16. 33	28. 35							
16. 53	28. 30							
17. 7	29. 5							
17. 51	28. 25							
18. 44	28. 25							
19. 3	28. 0							
19. 33	28. 35							
19. 47	28. 25							
20. 9	29. 40							
	***							
21. 3	30. 30							
21. 7	31. 25							
	***							
22. 13	33. 0							
22. 41	34. 30							
22. 53	35. 10							
23. 0	35. 10							
23. 12	35. 40							
23. 23	35. 25							
23. 31	35. 25							
23. 59	36. 30							
Mar.22		Mar.22		Mar.22		Mar.22		
0. 0	20. 36. 30	0. 0	·1296	0. 0	·03050	1. 0	53 ·9	56 ·7
0. 10	39. 35	1. 0	·1298	5. 18	·03126	3. 0	53 ·9	56 ·5
0. 16	40. 0	1. 26	·1303	11. 57	·03130	Max.	54 ·6	57 ·0
	***	1. 46	·1309	15. 45	·03110	9. 0	54 ·5	57 ·6
0. 56	40. 0	2. 7	·1306	16. 25	·03095	Min.	53 ·3	55 ·9
1. 25	38. 15	4. 31	·1309	20. 19	·03095	21. 0	53 ·9	56 ·0
	***	4. 52	·1303	23. 26	·03060			
1. 51	38. 30	5. 25	·1308	23. 59	·03070			
1. 56	39. 5	7. 30	·1314					
2. 10	38. 0	7. 54	·1312					
2. 55	37. 50	9. 19	·1314					
3. 54	36. 5	9. 33	·1309					
4. 52	33. 55	9. 52	·1313					
5. 10	32. 30	10. 12	·1308					
5. 31	32. 10	10. 44	·1314					
6. 55	32. 35	11. 3	·1307					
8. 43	31. 35	11. 32	·1309					
9. 51	32. 30	12. 10	·1306					
10. 9	31. 0	12. 30	·1310					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Mar.22		Mar.22						
h m	° ′ ″	h m		h m		h m	°	°
10. 24	20. 29. 5	13. 3	·1305					
10. 28	29. 5	13. 15	·1309					
10. 46	27. 25	13. 28	·1306					
11. 25	30. 5	13. 43	·1309					
12. 13	29. 40	14. 0	·1305					
12. 43	31. 0	15. 5	·1309					
12. 55	30. 35	16. 0	·1315					
13. 25	31. 40	16. 15	·1311					
13. 43	30. 30	16. 24	·1317					
13. 56	30. 40	16. 33	·1313					
14. 23	30. 0	16. 46	·1319					
14. 53	30. 10	17. 20	·1315					
15. 22	29. 25		***					
15. 28	31. 5	18. 32	·1322					
15. 38	33. 30	19. 53	·1309					
15. 51	33. 50	23. 59	·1298					
15. 57	32. 30							
16. 9	32. 40							
16. 27	31. 30							
16. 38	30. 25							
16. 54	29. 50							
17. 0	28. 35							
17. 19	29. 45							
17. 48	29. 50							
17. 56	29. 25							
18. 7	29. 25							
18. 16	30. 0							
19. 10	30. 0							
	***							
19. 38	29. 40							
21. 11	33. 50							
21. 24	32. 40							
21. 58	33. 30							
22. 39	35. 50							
22. 46	35. 25							
23. 59	40. 40							
Mar.23		Mar.23		Mar.23		Mar.23		
0. 0	20. 40. 40	0. 0	·1298	0. 0	·03070	1. 0	54·1	57·5
0. 24	41. 5	0. 12	·1300	1. 52	·03100	3. 0	54·2	57·7
0. 27	40. 55	0. 17	·1296	3. 21	·03140	Max.	54·8	58·0
0. 39	41. 55	0. 30	·1300	5. 10	·03166	9. 0	54·6	58·0
0. 55	42. 30	0. 36	·1296	11. 30	·03150	Min.	53·6	55·9
1. 57	41. 45	0. 53	·1306	13. 17	·03140	21. 0	53·9	56·5
2. 4	42. 50	1. 11	·1302	13. 34	·03150			
2. 9	40. 20	1. 56	·1306	14. 5	·03120			
2. 17	40. 20	2. 10	·1309	18. 6	·03124			
2. 25	40. 55	2. 17	·1297	19. 25	·03116			
2. 36	40. 55	2. 30	·1307	23. 59	·03110			
2. 54	39. 5	2. 40	·1306					
3. 5	38. 20	2. 52	·1300					
3. 19	38. 30	3. 32	·1309					
3. 44	37. 40	3. 52	·1308					
3. 57	37. 40	4. 10	·1311					
4. 17	36. 35	4. 49	·1300					
4. 23	36. 35	5. 16	·1311					
4. 53	33. 40	5. 32	·1310					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Mar.23		Mar.23						
h m	° ′ ″	h m		h m		h m	°	°
5. 11	20. 33. 50	5. 44	·1316					
5. 43	32. 55	7. 8	·1315					
7. 56	32. 35	7. 38	·1319					
8. 17	31. 45	8. 19	·1314					
8. 30	32. 40	8. 34	·1317					
8. 40	31. 50	9. 3	·1308					
8. 48	31. 50	9. 16	·1313					
9. 1	29. 25	9. 30	·1309					
9. 9	29. 25	9. 47	·1314					
9. 39	30. 35	10. 9	·1312					
10. 8	27. 30	10. 26	·1316					
10. 26	29. 10	10. 55	·1312					
11. 5	31. 0	11. 6	·1314					
12. 13	30. 35	11. 35	·1308					
12. 26	31. 30	12. 12	·1315					
12. 42	30. 35	12. 28	·1312					
13. 7	30. 55	12. 40	·1313					
13. 22	31. 10	12. 56	·1318					
13. 46	37. 40	13. 17	·1313					
14. 10	34. 0	13. 43	·1321					
15. 22	30. 30	14. 37	·1313					
16. 17	30. 30	15. 35	·1311					
17. 38	29. 0	16. 17	·1313					
18. 23	31. 0	16. 56	·1319					
18. 38	30. 35	17. 28	·1314					
18. 56	31. 5	18. 28	·1308					
19. 21	29. 50	19. 10:	·1315					
19. 30	29. 20	19. 28	·1309					
20. 8	29. 15	20. 41	·1305					
20. 14	30. 40	21. 0	·1306					
20. 35	30. 0		***					
	***	21. 26	·1319					
21. 28	30. 15	22. 25	·1317					
21. 40	30. 15		***					
21. 43	31. 35	23. 37	·1326					
21. 51	31. 0	23. 59	·1325					
22. 19	32. 5							
23. 11	34. 55							
23. 33	37. 50							
23. 59	38. 55							
Mar.24		Mar.24		Mar.24		Mar.24		
0. 0	20. 38. 55	0. 0	·1325	0. 0	·03110	1. 0	54·1	57·6
0. 24	38. 5	0. 28	·1314	1. 54	·03138	3. 0	54·8	58·0
0. 39	39. 10	1. 5	·1319	2. 36	·03160	Max.	55·8	59·0
1. 24	39. 30	2. 0	·1320	5. 49	{ ·03210	9. 0	55·1	58·0
1. 44	38. 15	2. 40	·1324		·03200	Min.	54·0	55·9
2. 8	37. 55	3. 7	·1320	7. 0	·03200	21. 0	54·9	55·9
2. 41	38. 30	3. 18	·1324	8. 56	·03217			
3. 4	36. 50	3. 47	·1320	11. 41	·03176			
3. 30	37. 10		***	12. 1	·03184			
3. 51	36. 0	4. 49	·1330	13. 11	·03180			
4. 24	35. 35	5. 32	·1327	13. 40	·03160			
4. 57	34. 0	6. 10	·1334	13. 52	·03157			
5. 19	32. 5	6. 57	·1330	14. 37	·03170			
5. 46	28. 15	7. 13	·1325	19. 55	·03160			
6. 7	29. 10	7. 34	·1331	22. 36:	·03115			
6. 31	32. 10	7. 53	·1325	23. 59	·03120			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 24		Mar. 24						
h m	° ′ ″	h m		h m		h m	°	°
7. 0	20. 32. 10	8. 36	·1326					
7. 10	32. 45	9. 9	·1342					
7. 19	32. 10	9. 19	·1330					
7. 47	32. 10	9. 54	·1323					
8. 1	30. 55	10. 15	·1333					
8. 11	30. 55	11. 16	·1330					
8. 21	31. 30	11. 40	·1321					
8. 37	30. 25	12. 0	·1320					
8. 51	28. 25	12. 17	·1319					
9. 17	33. 5	12. 45	·1324					
9. 39	30. 25	13. 0	·1318					
9. 42	30. 35	13. 21	·1325					
10. 0	29. 55	13. 29	·1323					
10. 17	28. 30	13. 35	·1328					
10. 58	28. 35	13. 42	·1323					
11. 12	27. 20	13. 56	·1326					
11. 28	28. 35	14. 21	·1317					
11. 39	27. 15	14. 34	·1320					
11. 56	29. 0	15. 0	·1314					
12. 9	29. 0	15. 29	·1323					
12. 25	29. 50	17. 9	·1324					
12. 34	29. 25	17. 54	·1326					
12. 41	29. 55	18. 20	·1323					
12. 57	29. 0	18. 42	·1326					
13. 32	28. 50	19. 17	·1316					
14. 0	19. 50	19. 34	·1319					
14. 38	25. 5	19. 52	·1314					
15. 4	26. 25	20. 25	·1318					
15. 24:	29. 30	20. 35	·1313					
15. 40	28. 5	20. 43	·1316					
16. 25	27. 50	21. 48	·1314					
16. 38	27. 0	22. 30	·1305					
16. 42	27. 55	22. 53	·1309					
18. 8	27. 15	23. 6	·1302					
18. 17	28. 55	23. 50	·1311					
18. 36	26. 35	23. 59	·1315					
19. 39	27. 5							
19. 45	29. 10							
20. 6	28. 0							
20. 11	28. 20							
20. 17	27. 45							
20. 23	29. 55							
20. 37	28. 25							
20. 46	29. 0							
20. 57	28. 45							
22. 8	34. 25							
22. 53	37. 0							
23. 0	36. 55							
23. 22	37. 45							
23. 27	37. 15							
23. 43	38. 10							
23. 59	38. 50							
Mar. 25		Mar. 25		Mar. 25		Mar. 25		
0. 0	20. 38. 50	0. 0	·1315	0. 0	·03120	1. 0	54·9	57·4
0. 7	39. 20	0. 19	·1318	0. 13	·03127 ·03156	3. 0	54·9	57·5
0. 23	39. 10	0. 30	·1312			Max.	55·1	57·5

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 25		Mar. 25		Mar. 25		Mar. 25		
h m	° ′ ″	h m		h m		h m	°	°
0. 35	20. 38. 5	1. 31	·1324	0. 43	·03162 ·03135	9. 0	54·5	56·4
1. 6	38. 55	2. 9	·1320	2. 49	·03150 ·03137	Min.	53·7	55·8
1. 28	38. 55	2. 40	·1324	6. 23	·03155	22. 20	54·1	55·9
1. 42	39. 45	3. 7	·1318	6. 53	·03180			
1. 58	38. 35	4. 24	·1322	7. 3	·03170			
2. 11	39. 20	4. 42	·1328	7. 22	·03190			
2. 42	37. 50	5. 15:	·1325	8. 41	·03165			
4. 14	34. 45	5. 39	·1333	11. 10	·03146			
4. 27	34. 45	6. 8	·1326	12. 48	·03144			
5. 9	33. 15	6. 37	·1313	14. 42	·03125			
6. 9	33. 35	6. 56	·1321	18. 34	·03130			
6. 23	33. 5	7. 15	·1308	20. 24	·03120			
6. 38	30. 30	7. 35	·1323	23. 11	·03080			
6. 55	31. 35	7. 56	·1306	23. 59	·03082			
7. 9	26. 15	8. 40	·1320					
7. 13	26. 50	9. 22	·1319					
7. 23	24. 0	10. 4	·1325					
7. 28	26. 5	10. 30	·1321					
7. 43	27. 30	10. 36	·1329					
7. 56	26. 0	10. 44	·1325					
8. 41	31. 45	10. 55	·1327					
9. 27	29. 55	11. 26	·1318					
9. 41	29. 55	12. 29	·1322					
9. 57	28. 50	12. 43	·1318					
10. 17	29. 20	13. 7	·1325					
10. 31	28. 20	13. 34	·1319					
10. 55	29. 30	13. 49	·1323					
11. 47	30. 0	14. 1	·1320					
12. 7	31. 20	14. 28	·1323					
12. 25	31. 45	15. 14	·1320					
12. 40	32. 30	15. 28	·1326					
13. 7	31. 50		***					
13. 29	34. 35	17. 52	·1318					
13. 41	33. 15	18. 45	·1324					
13. 57	35. 20	19. 19	·1318					
14. 11	36. 0	19. 50	·1307					
14. 55	33. 5	20. 8	·1307					
15. 11	33. 5	20. 34	·1313					
15. 21	31. 45	21. 22	·1307					
15. 26	31. 45	21. 30	·1312					
15. 31	30. 15	21. 40	·1303					
15. 38	30. 15	22. 24	·1306					
16. 2	29. 10	22. 50	·1313					
16. 38	28. 35	23. 13	·1305					
16. 53	29. 5	23. 59	·1313					
18. 11	29. 25							
18. 24	28. 50							
18. 48	28. 20							
	***							
19. 39	28. 45							
19. 59	27. 25							
20. 36	29. 30							
20. 40	29. 25							
20. 46	30. 40							
20. 55	29. 55							
21. 0	31. 0							
21. 11	30. 50							
21. 16	30. 15							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.25								
h m	° ′ ″	h m		h m		h m	°	°
21. 26	20. 29. 45							
21. 39	31. 35							
21. 47	30. 20							
22. 23	32. 30							
22. 28	31. 55							
22. 57	35. 35							
23. 1	35. 40							
23. 11	34. 50							
23. 40	36. 10							
23. 46	35. 35							
23. 59	36. 35							
Mar.26		Mar.26		Mar.26		Mar.26		
0. 0	20. 36. 35	0. 0	·1313	0. 0	·03082	Max.	54·3	55·8
0. 11	37. 10	0. 28	·1323	1. 25	·03090	1. 0	54·3	55·7
0. 24	39. 5	0. 34	·1318	5. 39	·03130	8. 30	53·9	55·4
0. 27	39. 5	0. 44	·1323	10. 5	·03096	21. 0	53·0	54·2
0. 33	38. 0	0. 58	·1323	11. 10	·03090	22. 0	53·3	54·1
0. 40	38. 55	1. 30	·1320	11. 33	·03080	23. 0	53·0	53·9
0. 53	38. 45	2. 6	·1329	12. 4	·03080	Min.	53·0	53·9
0. 58	37. 30	2. 25	·1323	12. 30	·03060			
1. 56	39. 20	3. 4	·1321	14. 3	·03066			
2. 17	38. 0	3. 56	·1329	18. 3	·03050			
2. 33	38. 10	4. 41	·1325	19. 41	·03040			
	***	4. 52	·1319	22. 53	·02985			
2. 55	37. 5	5. 41	·1324	23. 59	·02986			
2. 58	37. 35	6. 9	·1321					
3. 24	35. 55	6. 34	·1326					
4. 29	33. 25	6. 55	·1319					
4. 47	32. 15	8. 4	·1329					
4. 56	32. 45	8. 47	·1325					
5. 21	32. 30	9. 4	·1329					
5. 43	33. 35	9. 42	·1323					
5. 57	33. 0	9. 51	·1329					
6. 11	32. 50	10. 42	·1325					
6. 23	32. 5	11. 5	·1334					
7. 23	32. 30	11. 15	·1328					
8. 41	31. 50	11. 22	·1331					
8. 56	31. 0	11. 29	·1329					
9. 41	31. 35	11. 52	·1340					
9. 48	30. 50	12. 9	·1343					
10. 3	31. 30	12. 53	·1325					
10. 17	30. 30	14. 11	·1323					
10. 42	30. 40	15. 25	·1326					
10. 56	30. 25	15. 40	·1323					
11. 8	30. 35	18. 4:	·1329					
11. 19	32. 50	21. 5	·1312					
11. 27:	29. 15	21. 38	·1307					
11. 48	31. 40	22. 15	·1308					
11. 56	31. 30	23. 9	·1313					
12. 14	28. 55	23. 59	·1312					
12. 35	29. 0							
12. 55	30. 15							
13. 56	30. 0							
14. 27	30. 30							
14. 59	29. 45							
15. 24	30. 35							
15. 38	30. 5							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.26								
h m	° ′ ″	h m		h m		h m	°	°
17. 8	20. 30. 0							
17. 25	30. 20							
19. 54	27. 5							
20. 36	27. 15							
22. 10	31. 0							
23. 48	38. 5							
23. 56	38. 5							
23. 59	39. 30							
Mar.27		Mar.27		Mar.27		Mar.27		
0. 0	20. 39. 30	0. 0	·1312	0. 0	·02986	0. 0	53·0	55·0
0. 40	40. 45	0. 39	·1313	3. 2	·03050	1. 0	53·2	55·8
0. 53	39. 55	0. 45	·1309	5. 52	·03100	2. 0	53·6	56·0
1. 41	39. 55	1. 18	·1315	8. 3	·03110	3. 0	53·2	55·8
1. 46	40. 5	1. 36	·1312	8. 14	·03092	Max.	54·0	56·5
2. 4	39. 25	2. 4	·1321	8. 20	·03098	9. 0	53·8	56·0
2. 26	37. 50	2. 47	·1324	8. 37	·03080	Min.	52·0	54·0
2. 41	37. 50	2. 58	·1323	9. 25	·03096	21. 0	53·0	54·0
2. 56	36. 55	3. 15	·1329	10. 41	·03072	22. 0	52·6	54·2
3. 8	37. 30		***	11. 7	·03055	23. 0	52·9	54·5
3. 19	36. 50	3. 58	·1328	11. 42	·03050			
4. 9	36. 55	4. 8	·1331	12. 21	·03057			
4. 39	35. 35	4. 36:	·1329	12. 56	·03040			
4. 54	35. 50	5. 0	·1318	16. 5	·03044			
5. 38	31. 35	5. 20	·1323	21. 9	·03000			
5. 41	30. 30	5. 29	·1321	22. 43	·02972			
5. 58	29. 30	5. 38	·1325	23. 59	·02960			
6. 26	32. 0	5. 51	·1321					
6. 40	32. 25	6. 12	·1327					
7. 4	31. 45	6. 27	·1323					
7. 16	30. 20	6. 36	·1324					
7. 29	29. 0	7. 14	·1315					
7. 44	26. 20	7. 28	·1321					
7. 53	27. 5	7. 41	·1318					
7. 58	27. 30	7. 49	·1321					
8. 11	29. 50	8. 0	·1319					
8. 22	29. 10	8. 11	·1325					
8. 27	30. 25	8. 19	·1317					
8. 51	24. 30	8. 22	·1320					
8. 58	24. 15	8. 34	·1310					
9. 4	23. 0	8. 43	·1307					
9. 25	26. 15	9. 4	·1313					
9. 41	27. 10	9. 20	·1309					
9. 46	28. 10	9. 36	·1317					
9. 58	25. 25	10. 6	·1323					
10. 11	26. 30	10. 35	·1337					
10. 17	25. 45	10. 48	·1329					
10. 21	25. 45	11. 4	·1335					
10. 25	24. 55	11. 22	·1322					
10. 41	26. 35	11. 41	·1318					
11. 2	22. 30	12. 8	·1325					
11. 27	25. 55	12. 31:	·1316					
11. 56	26. 20	12. 52	·1326					
12. 10	29. 30	13. 9	·1323					
12. 21	34. 15	13. 40	·1325					
12. 29	34. 55	13. 52	·1323					
12. 41	33. 50	16. 29	·1324					
12. 49	31. 55	16. 48	·1328					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Mar.27		Mar.27						
h m	° ′ ″	h m		h m		h m	°	°
12.54	20.32. 5	17. 3	·1325					
13. 1	33.10	17.35	·1329					
13.20	33. 0	19. 8	·1319					
13.36	31.55	20.12	·1317					
13.59	31.10	21.12	·1318					
14.10	31.10	21.15	·1306					
14.47	30. 0	22.19	·1300					
	***	23. 0	·1308					
15.48	29.30	23.12	·1306					
16. 6	30.10	23.30	·1311					
16.25	30.10	23.59	·1311					
16.38	29.50							
16.57	30.30							
17. 9	29.50							
17.41	29.50							
18.10	28.40							
18.44	28.15							
19. 8	28.55							
19.22	28. 5							
19.41	28.40							
20. 0	28. 5							
20. 9	26.55							
20.11	27.30							
20.16	26.55							
20.26	27.45							
21. 8	27.55							
21.16	29. 0							
21.33	28.55							
22.43	32.10							
22.53	33.15							
22.56	33.25							
22.59	34. 5							
23. 8	33.50							
23.59	36.30							
Mar.28		Mar.28		Mar.28		Mar.28		
0. 0	20.36.30	0. 0	·1311	0. 0	·02960	0. 0	52·6	53·8
0.18	38. 5	0.41	·1319	1.54	·02970	1. 0	52·5	53·6
0.26	39.35	0.45	·1327	4. 3	·02990	2. 0	52·4	53·2
0.39	39.15	1.22	·1321	4.38	·03000	3. 0	52·8	54·0
0.44	41.10	2. 7	·1327	6.33	·03020	Max.	53·1	55·5
0.53	40.35	2.42	·1323	9. 0	·03010	9. 0	52·9	54·5
1.11	41. 0	3. 7	·1326	15. 0	·03000	21. 0	52·3	53·6
1.25	40.40	3.22	·1324	17.58	·02990	22. 0	52·1	53·0
1.55	41. 0	3.26	·1316	19.56	·02990	Min.	52·0	53·0
2. 3	40.50	3.38	·1325	23.35	·02920			
2.14	41.35	3.47	·1317	23.59	·02910			
2.40	40.30	4.11	·1313					
2.56	40.15	4.27	·1313					
3. 6	40.35	4.38	·1320					
3.22	39.55	5.12	·1327					
3.27	39.55	5.34	·1327					
3.34	38.30	6. 4	·1322					
3.40	39.50	6.45	·1327					
3.49	38.45	7.20	·1322					
3.54	38.50	8.39	·1326					
4.11	37. 0	10.57	·1323					
4.18	37.15	11. 9	·1328					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Mar.28		Mar.28						
h m	° ′ ″	h m		h m		h m	°	°
4.27	20.36. 5	11.30	·1323					
5.33	35. 0	11.41	·1328					
5.56	33.55	12. 3	·1327					
6.23	34. 5	12.19	·1321					
7. 2	32.50	12.26	·1325					
7.11	33.30	13.20	·1324					
7.30	31.30	13.31	·1328					
8.26	32. 5	13.40	·1325					
10.11	30.50	13.48	·1327					
11. 3	31. 5	14.31	·1322					
11.11	32. 0	15.40	·1326					
11.32	30. 5	16. 2	·1322					
11.47	31. 0	17.52	·1324					
12.18:	29.20	18.40	·1328					
12.32	30.30	21.26	·1303					
13.23	31.20	21.59	·1307					
13.57	29.50	22. 8	·1303					
14.25	29.40	23.59	·1312					
14.54	32.30							
15.36	30.30							
16. 1	31.50							
16.18	32. 0							
17. 4	33.15							
18.41	30.10							
18.53	29.15							
19. 4	28.50							
19.41	27.35							
	***							
20.10	27.35							
20.26	26.55							
20.41	27.30							
20.51	27.30							
20.55	28.40							
21. 8	28. 0							
	***							
22. 3	30.35							
23.59	37.40							
Mar.29		Mar.29		Mar.29		Mar.29		
0. 0	20.37.40	0. 0	·1312	0. 0	·02910	0. 0	52·1	54·3
0.13	38. 5	1.14	·1318	0.31	·02915	1. 0	52·0	54·2
0.38	39.30	1.35	·1326	4.48	·02970	3. 0	52·2	54·8
1.10	40.10	1.52	·1324	6.30	·02977	Min.	51·6	53·5
1.27	42. 5	2. 0	·1321	8. 9	·02966	9. 0	52·0	54·0
1.40	42.30	2.12	·1325	9.11	·02970	21. 0	52·1	55·1
1.56	39.30	2.37	·1321	9.34	·02940	Max.	52·3	55·2
2. 9	40.25	2.46	·1326	15.52	·02967			
2.51	38.45	2.53	·1326	19.30	·02960			
2.57	37.30	2.57	·1319	21. 9	·02940			
3. 4	38.35	3.11	·1326	22.15	·02935			
3.11	37.20	3.14	·1320		(+)			
3.33	36.35	3.39	·1324					
3.41	35.40	3.48	·1318					
3.50	36. 0	4. 6	·1324					
5.38	33. 0	4.33	·1325					
6. 4	33. 0	4.42	·1321					
6.25	32.25	5. 7	·1323					
7.24	33.35	5.37	·1317					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Mar.29		Mar.29						
h m	° ′ ″	h m		h m		h m	°	°
7.30	20.33. 0	6.27	·1327					
7.58	33.50	7. 7	·1321					
8.17	32.50	7.38	·1325					
8.53	32.30	8.45	·1319					
9. 7	27.45	9. 7	·1343					
9.24	31. 0	9.12	·1337					
9.39	27.40	9.16	·1344					
9.52	28.25	9.36	·1329					
10. 5	27. 0	9.48	·1327					
10.23	26.40	10.12	·1319					
10.34	27.40	10.24	·1322					
10.40	27.40	11.25	·1315					
11.41	31.30	12. 7	·1319					
13.55	30.55	13.58	·1317					
14.18	31.10	16.53	·1321					
14.42	30.15	17.11	·1318					
14.57	31. 0	17.43	·1323					
15.21	30.30	18.16	·1324					
15.27	31. 5	18.19	·1321					
15.41	30.30	18.45	·1318					
16.47	30.30	18.57	·1321					
17. 9	31. 5	19. 4	·1317					
17.39	30.20	19.17	·1323					
18.57	30. 0	19.21	·1317					
19.11	28.35	19.35	·1323					
19.17	29.30		***					
19.34	27.35	20.27	·1319					
19.54	29.35	20.30	·1315					
20. 1	28.40	20.45	·1318					
20.12	29.30	21.34	·1311					
20.28	29. 5	22.24	·1299					
20.39	28.15	22.30	·1301					
20.55	29.40	22.43	·1298					
21.10	30. 0	22.55	·1303					
22.23	35.10	23.59	·1298					
22.44	36. 0							
23.23	38.35							
23.34	39.55							
23.59	40. 5							
Mar.30		Mar.30		Mar.30		Mar.30		
0. 0	20.40. 5	0. 0	·1298		(†)	Min.	52·8	56·0
0.18	43. 0	0.12	·1309	1. 0	·02956*	1. 0	52·9	56·2
1.10	43.15	1.32	·1317	1.57	·03000	2. 0	53·0	56·4
1.23	44. 5	1.47	·1313	3.25	·03040	3. 0	53·5	56·9
1.26	43.40	1.51	·1315	6.40	·03080	9. 0	54·9	58·0
1.48	44.50	2.15	·1303	7. 8	·03100	Max.	55·0	58·8
1.55	44.15	2.46	·1318	7.25	·03090	21. 0	54·8	57·4
2.11	39.40	3.29	·1322	7.39	·03100	22.30	54·5	56·8
2.35	39.20	3.43	·1321	7.50	·03096	23. 0	54·6	57·0
3. 5	36.30	3.56	·1325	9. 3	·03110			
3.29	36.10	4.12	·1322	9.55	·03090			
3.46	36.25	4.38	·1325	10.15	·03097			
3.57	36. 5	5. 7	·1321	10.33	·03090			
4.11	36.30	5.40	·1325	11. 3	·03098			
6. 4	33.50	5.54	·1321	11.43	·03070			
6.25	32.20	6. 4	·1323	12. 8:	·03076			
6.33	32.35	6.19	·1320	12.34	·03060			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Mar.30		Mar.30		Mar.30				
h m	° ′ ″	h m		h m		h m	°	°
6.55	20.29.30	6.36	·1323	13.35	·03080			
7.12	31.50	6.53	·1316	15.22:	·03110			
7.31	27.30	7. 7	·1322	17.24	·03076			
7.47	28.40	7.18	·1324	19. 3	·03085			
7.56	25.30	7.26	·1320	21.34	·03080			
8. 2	25.30	7.42	·1327	22.58	·03060			
8.11	24.10	7.53	·1321	23.59	·03075			
8.26	26.30	8.20	·1326					
9. 3	28.55	8.35	·1320					
9.11	28.25	8.42	·1321					
9.21	31. 0	8.58	·1313					
9.38	31.30	9. 5	·1317					
9.41	29.15	9.10	·1314					
9.53	31.50	9.22	·1323					
10.10	25.40	9.39	·1317					
10.23	26.35	9.50	·1320					
10.40	22.30	10. 2	·1307					
10.52	22.20	10.18	·1318					
11.11	27. 5	10.39	·1301					
11.26	27.35	10.56	·1306					
11.48	20.50	11.10	·1313					
12. 4	27. 0	11.14	·1308					
12.23	23.15	11.20	·1313					
12.41	22.45	11.30	·1313					
13.13	25. 5	12. 0	·1327					
13.53	26.30	12.18	·1327					
14. 9	29. 0	12.33	·1314					
14.38	27.35		***					
14.57	29. 0	12.55	·1309					
15.38	27.15	13.22	·1314					
15.57	31.30	13.56	·1302					
16.19	31.30	14.13	·1309					
16.42	34.35	14.32	·1303					
17. 4	31.45	15.17	·1311					
17.17	30.30	15.38	·1309					
17.26	29.30	16. 3	·1297					
17.33	30. 0	17.11	·1328					
17.42	30. 0		***					
17.55	28.30	18.35	·1313					
18.36	27.25	18.50	·1312					
19. 9	29.30	19.13	·1313					
19.56	28. 5	20.10	·1301					
20. 1	29.40	20.28	·1307					
20. 8	28.50		***					
	***	22.27	·1310					
20.31	30. 0	22.43	·1304					
21.11	29.45	23.11	·1309					
	***	23.17	·1306					
22.19	32.20	23.59	·1308					
22.29	33.20							
23.59	36. 0							
Mar.31		Mar.31		Mar.31		Mar.31		
0. 0	20.36. 0	0. 0	·1308	0. 0	·03075	Min.	54·7	57·7
0.48	36.45	0.50	·1313	0.31	·03090	0. 0	54·8	58·0
0.53	35.40	1. 5	·1307	2. 0	·03150	1. 0	55·0	58·8
1. 0	36.35	1.17	·1314	2.30	·03157	2. 0	55·3	59·1
1. 2	37.20	2.15	·1317	3.17	·03193	3. 0	55·6	59·3

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 31		Mar. 31		Mar. 31		Mar. 31		
h m	° ′ ″	h m		h m		h m	°	°
1. 7	20. 39. 5	2. 51	·1304	4. 18	·03205	9. 0	56·3	60·3
1. 21	37. 55	3. 15	·1309	7. 38	·03250	Max.	58·1	61·7
2. 5	39. 30	3. 18	·1315	12. 4	·03240	21. 0	57·9	59·0
2. 17	38. 35	3. 29	.1316	12. 26	·03230	22. 0	57·2	59·4
3. 1	37. 10	3. 56	·1309	13. 52	·03250	23. 0	57·1	59·4
3. 11	37. 40	4. 44	·1318	14. 54	·03260			
3. 47	35. 30	5. 31	·1315	15. 26	·03250			
6. 30	32. 25	5. 38	·1319	18. 57:	·03280			
6. 51	29. 35	5. 58	·1315	21. 54	·03274			
7. 11	25. 30	6. 15	·1318	23. 59	·03240			
7. 51	30. 0	6. 55	·1313					
8. 39	30. 0	7. 38	·1327					
8. 52	25. 30	8. 4	·1320					
9. 6	25. 20	8. 26	·1310					
10. 31	31. 5	8. 42	·1310					
10. 58	30. 20	9. 11	·1328					
11. 14	30. 35	9. 49	·1312					
11. 34	29. 30	10. 13	·1313					
11. 58	33. 45	11. 9	·1316					
13. 11	30. 5	11. 20	·1324					
13. 41	32. 30	11. 33	·1324					
13. 58	30. 35	11. 58	·1334					
14. 17:	29. 55	12. 24	·1320					
14. 58	33. 30	12. 33	·1322					
15. 34	30. 0		***					
15. 42	30. 35	13. 12	·1313					
15. 53	29. 30	13. 49	·1317					
16. 47	29. 0	14. 26	·1311					
17. 11	31. 0	14. 46	·1312					
17. 35	30. 35	15. 3	·1317					
17. 43	30. 35	15. 56	·1314					
19. 17	28. 50	16. 11	·1311					
19. 56	28. 50	16. 38	·1315					
22. 44	33. 20	16. 43	·1312					
22. 48	33. 50	17. 24	·1309					
23. 12	33. 50	19. 22	·1311					
23. 31	36. 30	21. 18	·1305					
23. 43	36. 0	22. 52	·1310					
23. 59	37. 5	23. 13	·1305					
		23. 35	·1316					
		23. 48	·1310					
		23. 59	·1314					
Apr. 1		Apr. 1		Apr. 1		Apr. 1		
0. 0	20. 37. 5	0. 0	·1314	0. 0	·03240	0. 0	57·7	59·0
0. 39	38. 30	0. 33	·1318	0. 54	·03247	1. 0	57·6	59·7
0. 58	40. 30	0. 44	·1312	4. 1	·03290	2. 0	57·4	59·4
1. 23	39. 0	1. 26	·1305	4. 39	·03310	3. 0	57·2	59·5
1. 40	39. 25	1. 44	·1315	5. 9	·03300	Max.	58·3	60·8
1. 56	38. 50	2. 5	·1314	6. 9	·03325	9. 0	57·6	60·2
2. 56	39. 10		***	7. 18	·03340	Min.	55·9	57·4
3. 6	40. 25	2. 52	·1323	10. 0	·03317	22. 36	56·8	58·0
3. 11	38. 35	3. 0	·1320	10. 54	·03307			
	***	3. 10	·1328	11. 29	·03295			
3. 57	38. 20	3. 28	·1319	12. 39	·03290			
4. 12	34. 30	3. 40	·1323	12. 55	·03295			
4. 39	33. 35	3. 47	·1314	13. 46	·03290			
5. 11	35. 0	4. 3	·1314	16. 19	·03286			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 1		Apr. 1		Apr. 1				
h m	° ′ ″	h m		h m				
5. 27	20. 33. 35	4. 11	·1311	18. 57	·03270			
5. 49	33. 25	4. 23	·1316	22. 0	·03230			
6. 7	33. 30	4. 27	·1312	23. 59	·03230			
6. 29	32. 30	4. 41	·1316					
6. 42	30. 30	5. 5	·1312					
7. 23	30. 35	5. 15	·1300					
7. 39	27. 50	5. 20	·1302					
7. 56	28. 0	5. 26	·1299					
8. 12	29. 45	5. 38	·1309					
8. 29	28. 30	5. 59	·1316					
8. 45	29. 35	6. 14	·1313					
8. 56	29. 35	6. 19	·1316					
9. 4	27. 35	6. 57	·1300					
9. 11	27. 35	7. 13	·1299					
9. 15	27. 0	7. 21	·1303					
9. 35	26. 20	7. 30	·1299					
9. 43	27. 10	8. 5	·1307					
10. 0	26. 50	8. 25	·1305					
10. 26	28. 55	9. 0	·1313					
10. 35	23. 0	9. 26	·1319					
10. 56:	28. 30	9. 56	·1312					
11. 23	30. 40	10. 5	·1315					
11. 34	29. 50	10. 17	·1314					
12. 13	30. 45	10. 28	·1310					
12. 25	29. 30	10. 48	·1326					
12. 34	31. 15	11. 18	·1314					
13. 0	31. 30	11. 28	·1320					
13. 11	33. 5	11. 41	·1314					
13. 26	32. 40	11. 48	·1318					
13. 38	33. 15	11. 51	·1316					
14. 38	30. 40	12. 20	·1315					
14. 47	29. 25	12. 31	·1304					
15. 2	29. 50	12. 45	·1313					
15. 10	29. 25	12. 53:	·1309					
15. 48	29. 50	13. 10	·1314					
15. 56	28. 55	13. 18	·1311					
16. 7	30. 5	13. 35	·1314					
16. 25	28. 0	13. 55	·1311					
17. 26	29. 30		***					
17. 47	28. 50	14. 42	·1315					
17. 53	29. 25	14. 52	·1311					
18. 39	27. 55	15. 5	·1315					
19. 2	30. 25	15. 13	·1310					
19. 25	30. 25	15. 19	·1313					
19. 40	32. 5	15. 38	·1311					
	***	15. 59	·1315					
20. 11	30. 30	16. 3	·1312					
20. 40	31. 25	16. 9	·1317					
20. 52	31. 5	16. 15	·1313					
21. 10	32. 45	16. 37	·1317					
21. 33	31. 30	17. 25	·1313					
22. 1	33. 40	17. 58	·1315					
23. 59	37. 25	18. 52	·1318					
		19. 34	·1309					
		20. 0	·1311					
		20. 8	·1307					
		20. 32	·1313					
		20. 42	·1314					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Apr. 1						
h m	° ′ ″	h m		h m				
		21. 24	·1307					
		21. 51	·1311					
		22. 16	·13[illegible]6					
		23. 36	·1303					
		23. 4[illegible]	·13[illegible]					
			(†)					
Apr. 2		Apr. 2		Apr. 2		Apr. 2		
0. 0	20. 37. 25		(†)	0. 0	·03230	1. 0	56 ·8	58 ·6
0. 26	36. 50	0. 19	·1305	0. 38	·03230	Max.	57 ·4	59 ·4
1. 1	38. 15	0. 49	·1305	1. 33	·03250	9. 0	56 ·6	58 ·2
1. 26	38. 15	1. 4	·1309	4. 55	·03280	Min.	55 ·9	58 ·0
1. 38	39. 50	1. 24	·1308	9. 33	·03285	21. 0	56 ·3	58 ·8
2. 23	37. 5	1. 39	·1315	15. 19	·03270	22. 0	56 ·3	58 ·8
6. 0	32. 20	2. 4	·1306	17. 26	·03265	23. 0	56 ·4	58 ·8
9. 39	30. 55		***	19. 41	·03270			
9. 55	31. 45	3. 56	·1315	22. 56	·03226			
10. 8	31. 15	4. 6	·1312	23. 59	·03235			
10. 38	27. 10	4. 24	·1317					
11. 25	31. 0	4. 51	·1315					
14. 5	29. 55	5. 11	·1319					
15. 8	30. 5	5. 29	·1313					
15. 24	31. 15	5. 37	·1316					
15. 54	30. 20	5. 46	·1313					
16. 11	29. 25		***					
16. 56	31. 25	7. 12	·1320					
17. 48	28. 55	7. 24	·1325					
20. 39	28. 15	7. 47	·1316					
22. 10	30. 35	8. 13	·1317					
23. 15	33. 0	8. 30	·1322					
	(†)	8. 45	·1317					
		9. 6	·1320					
		9. 25	·1313					
		9. 39	·1313					
		10. 7	·1325					
		11. 5	·1312					
		11. 15	·1316					
		11. 34	·1317					
		11. 54	·1313					
		13. 41	·1311					
		15. 17	·1312					
		16. 3	·1317					
		16. 39	·1312					
		17. 25	·1319					
		20. 0	·1309					
		20. 30	·1311					
			***					
		22. 43	·1304					
		23. 59	·1307					
Apr. 3		Apr. 3		Apr. 3		Apr. 3		
	(†)	0. 0	·1307	0. 0	·03235	0. 0	56 ·5	59 ·3
1. 0	20. 36. 52*	0. 19	·1308	1. 1	·03240	1. 0	56 ·9	59 ·7
1. 23	36. 5	1. 25	·1311	2. 59	·03295	3. 0	57 ·1	60 ·2
3. 19	32. 40	2. 20	·1309	7. 53	·03317	Max.	58 ·0	60 ·3
6. 14	30. 30	3. 47	·1309	12. 27	·03300	9. 0	57 ·7	59 ·8
6. 26	30. 35	4. 45	·1312	17. 45	·03285	21. 0	56 ·8	58 ·2
7. 5	29. 40	5. 6	·1310	20. 18	·03280	22. 0	56 ·6	58 ·2

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 3		Apr. 3		Apr. 3		Apr. 3		
h m	° ′ ″	h m		h m		h m	°	°
7. 23	20. 29. 55	5. 38	·1316	22. 23:	·03235	23. 0	56 ·4	58 ·1
7. 38	27. 40	5. 45	·1314	23. 59	·03242	Min.	56 ·4	58 ·1
8. 24:	30. 15	6. 22	·1315					
9. 4	30. 0	6. 45	·1319					
17. 9	27. 30	7. 25	·1320					
17. 39	27. 55	7. 39	·1314					
20. 0	25. 40	9. 17	·1321					
20. 41	25. 55	10. 7	·1318					
22. 19	31. 10	10. 32	·1320					
23. 3	34. 50	10. 45	·1317					
23. 8	34. 50	11. 15	·1318					
23. 59	37. 50		(†)					
		14. 4	·1317					
		17. 2	·1316					
		17. 30	·1318					
		18. 29	·1319					
		20. 22	·1308					
		21. 28	·1305					
		22. 32	·1304					
		23. 0	·1308					
		23. 15	·1305					
		23. 59	·1305					
Apr. 4		Apr. 4		Apr. 4		Apr. 4		
0. 0	20. 37. 50	0. 0	·1305	0. 0	·03242	0. 0	56 ·7	59 ·0
0. 9	38. 5	1. 7	·1313	3. 7	·03300	Min.	56 ·5	59 ·0
0. 21	37. 5	1. 35	·1308	4. 25	·03310	1. 0	56 ·5	59 ·3
0. 28	38. 15		***	5. 1	·03326	2. 0	56 ·6	59 ·9
0. 35	38. 20	4. 13	·1315	5. 44	·03320	3. 0	56 ·6	60 ·0
	(†)	4. 27	·1305	10. 25	·03317	9. 0	58 ·0	60 ·1
0. 46	43. 35	4. 51	·1318	10. 53	·03290	Max.	58 ·6	60 ·9
1. 8	43. 20	5. 40	·1314	12. 27	·03300	21. 0	57 ·8	59 ·8
1. 11	44. 30	5. 56	·1315	15. 9	·03296	22. 0	58 ·0	59 ·2
1. 39	41. 45	6. 8	·1313	16. 24	·03320	23. 0	57 ·7	58 ·9
1. 48	42. 10	6. 26	·1317	16. 41	·03303			
2. 58	39. 50	7. 19	·1313	20. 55	·03310			
4. 15	37. 0	7. 34	·1307	22. 56	·03270			
4. 26	35. 0	7. 54	·1314	23. 59	·03272			
4. 35	34. 30	8. 6	·1323					
4. 42	33. 15	8. 24	·1320					
5. 49	34. 20	8. 41	·1312					
6. 41	34. 0	9. 16	·1311					
7. 13	33. 5	9. 48	·1310					
7. 37	30. 5	10. 4	·1314					
7. 43	30. 5	10. 19	·1315					
7. 54	26. 0	10. 35	·1343					
8. 7	27. 35	11. 11	·1317					
8. 16	27. 0	11. 37	·1315					
8. 47	31. 10	11. 56	·1311					
9. 23	32. 45	14. 31	·1312					
9. 34	32. 30	14. 42	·1315					
10. 10	33. 5	16. 14	·1308					
10. 25	30. 35	16. 26	·1318					
10. 38	32. 5	17. 33	·1313					
10. 43	32. 5	17. 59	·1319					
11. 55	33. 0	18. 36	·1312					
12. 18	33. 55	19. 14	·1317					
12. 39	33. 20	20. 58	·1306					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

April 2. From 22h. 15m. to 23h. 15m., damper experiments with the Declination Magnet were in progress; and from April 2d. 23h. 30m. to April 3d. 1h. 10m. the damper was in contact with the photographic magnet.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 4		Apr. 4						
h m	° ′ ″	h m		h m		h m	°	°
13. 25	20. 33 20	21. 59	·1304					
13. 42	34. 0	22. 15	·1300					
13. 49	33. 50	22. 26	·1303					
14. 24	35. 20	23. 8	·1300					
14. 29	34. 15	23. 59	·1310					
15. 8	33. 20							
15. 24	32. 0							
15. 52	33. 45							
16. 8	33. 20							
16. 27	34. 5							
16. 40	32. 55							
17. 8	32. 45							
17. 16	34. 0							
17. 28	33. 45							
17. 40	34. 25							
18. 8	33. 0							
18. 17	33. 15							
18. 26	33. 0							
18. 57	33. 30							
19. 31	30. 25							
20. 38	29. 55							
20. 53	30. 35							
21. 4	30. 15							
23. 59	41. 15							
Apr. 5		Apr. 5		Apr. 5		Apr. 5		
0. 0	20. 41. 15	0. 0	·1310	0. 0	·03272	0. 0	57·8	59·2
0. 24	42. 15	0. 17	·1311	0. 20	·03266	1. 0	57·8	59·4
0. 31	41. 0	0. 25	·1302	2. 25	·03307	2. 0	57·8	59·2
1. 10	41. 35	1. 26	·1314	4. 40	·03340	3. 0	58·4	61·3
1. 55	39. 50	1. 49	·1311	7. 39	·03330	Max.	59·4	62·2
2. 12	39. 25	2. 14	·1315	14. 5	·03307	9. 0	58·5	60·0
2. 31	37. 40	2. 29	·1309	14. 26	·03320	Min.	57·4	58·8
3. 0	36. 50	3. 26	·1317	15. 11	·03300	21. 0	58·0	58·9
4. 20	33. 45	4. 9	·1313	15. 54	·03310	22. 0	57·8	59·4
5. 57	32. 30	4. 44	·1321	16. 2	·03295	23. 0	58·2	59·4
7. 17	33. 40	5. 3	·1317	18. 27	·03307			
9. 10	33. 35	8. 42	·1326	23. 59	·03290			
9. 30	33. 20	8. 44	·1322					
10. 53	33. 45	9. 42	·1323					
12. 47	33. 20	9. 50	·1329					
13. 23	32. 10	10. 9	·1323					
14. 0	32. 25	10. 27	·1327					
14. 47	37. 55	10. 48	·1323					
15. 9	34. 35	10. 57	·1327					
15. 43	35. 40	11. 47	·1325					
16. 21	32. 45	11. 50	·1322					
16. 26	33. 35	12. 49	·1325					
17. 25	31. 30	14. 15	·1315					
18. 17	29. 35	14. 34	·1319					
18. 25	30. 45	14. 40	·1315					
18. 28	30. 15	14. 52	·1319					
18. 38	31. 5	15. 17	·1315					
19. 27	27. 50	15. 53	·1323					
19. 38	28. 20	16. 16	·1318					
19. 43	27. 25	18. 11	·1316					
19. 56	28. 30	18. 22	·1321					
20. 9	27. 50	18. 26	·1317					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 5		Apr. 5						
h m	° ′ ″	h m		h m		h m	°	°
20. 50	20. 29. 25	18. 33	·1320					
22. 9	37. 35	20. 6	·1314					
22. 27	36. 50	20. 51	·1303					
23. 4	37. 10	21. 26	·1308					
23. 20	38. 30	21. 58	·1306					
23. 59	40. 0	23. 59	·1316					
Apr. 6		Apr. 6		Apr. 6		Apr. 6		
0. 0	20. 40. 0	0. 0	·1316	0. 0	·03290	0. 0	58·3	59·8
0. 39	41. 40	1. 6	·1319	3. 55	·03230	1. 0	58·4	59·8
0. 43	41. 20	1. 27	·1315	7. 38:	·03370	2. 0	58·4	59·8
1. 22	41. 20	3. 11	·1325	11. 4	·03360	3. 0	58·7	60·0
2. 9	39. 30	3. 30	·1321	12. 45	·03340	Max.	59·8	61·8
2. 23	39. 30	4. 17	·1318	12. 56	·03340	9. 0	59·1	61·1
4. 27	33. 55	4. 48	·1322	13. 15	·03330	21. 0	57·5	57·6
5. 57	31. 45	6. 8	·1319	14. 57	·03317	Min.	57·3	57·6
6. 18	31. 45	6. 26	·1315	18. 3	·03300	22. 0	57·3	57·6
7. 1	30. 30	7. 57	·1324	20. 26	·03280	23. 0	57·6	58·5
7. 29	31. 30	8. 10	·1321	22. 55	·03240			
7. 52	31. 0	8. 18	·1327	23. 59	·03255			
7. 57	32. 5	8. 47	·1323					
8. 9	31. 30	9. 26	·1328					
8. 27	32. 10	9. 59	·1324					
10. 56	31. 50	10. 10	·1324					
11. 36	33. 30	10. 21	·1328					
11. 53	33. 0	11. 30	·1323					
12. 30	33. 0	11. 42	·1327					
12. 41	34. 45	12. 32	·1328					
12. 52	32. 30	12. 46	·1335					
13. 29	32. 45	13. 0	·1329					
14. 41	33. 40	13. 11	·1330					
15. 0	32. 25	13. 30:	·1325					
15. 22	33. 10	14. 2	·1327					
15. 41	31. 40	14. 5	·1325					
16. 35	32. 10	14. 52	·1329					
16. 58	31. 5	15. 3	·1325					
17. 21	31. 50	15. 35	·1330					
17. 39	30. 35	15. 45	·1328					
17. 53	31. 0	16. 15	·1328					
18. 12	30. 45	16. 47	·1333					
18. 24	31. 50	17. 25	·1330					
19. 25	29. 25	17. 58	·1333					
20. 41	28. 20	18. 26	·1327					
21. 29	29. 15	19. 8	·1331					
23. 0	33. 45	21. 56	·1317					
23. 11	32. 40	22. 30	·1323					
	***	23. 41	·1318					
23. 59	36. 45	23. 59	·1322					
Apr. 7		Apr. 7		Apr. 7		Apr. 7		
0. 0	20. 36. 45	0. 0	·1322	0. 0	·03255	0. 0	57·6	58·9
1. 9	39. 10	0. 12	·1315	1. 10	·03280	1. 0	57·4	59·2
1. 23	38. 35	0. 34	·1323	6. 37	·03246	2. 0	57·8	60·4
1. 38	39. 5	0. 49	·1326	7. 0	·03250	3. 0	58·0	60·3
1. 56	37. 50	1. 21	·1324	9. 3	·03277	Max.	59·0	61·1
2. 27	37. 15	1. 45	·1331	9. 15	·03270	9. 0	58·4	60·2
3. 11	37. 5	2. 3	·1327	9. 48	·03280	Min.	57·0	58·2
3. 31	38. 0	3. 21	·1338	11. 23	·03250	21. 0	57·8	58·3

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 7		Apr. 7		Apr. 7		Apr. 7		
h m	° ′ ″	h m		h m		h m	°	°
5. 17	20. 34. 55	3. 31	·1333	11. 30	·03250	23. 0	57 ·8	58 ·7
6. 29	33. 10	3. 39	·1336	12. 4	·03240			
6. 39	33. 25	4. 8	·1327	13. 3	·03230			
6. 55	32. 0		***	15. 13	·03240			
7. 2	32. 35	5. 8	·1337	19. 57	·03220			
7. 11	31. 40	5. 12	·1333	23. 32	·03180			
7. 44	31. 50	5. 21	·1337	23. 59	·03175			
8. 1	30. 35	5. 49	·1340					
8. 25	30. 50	6. 9	·1337					
8. 51	31. 55	6. 26	·1341					
9. 10	29. 20	6. 41	·1330					
9. 24	29. 20	7. 2	·1339					
9. 30	28. 35	7. 12	·1335					
9. 55	31. 50	7. 24	·1338					
10. 10	30. 55	7. 44	·1335					
10. 43	23. 55	7. 57	·1329					
11. 12	26. 0	8. 7	·1333					
11. 25	28. 55	8. 30	·1327					
11. 51	31. 50	8. 38	·1331					
11. 58	30. 30	8. 48	·1323					
12. 33	30. 0	9. 13	·1330					
13. 8	30. 20	9. 27	·1322					
13. 40	31. 50	9. 40	·1326					
14. 0	31. 20	9. 48	·1333					
14. 9	32. 25	10. 2	·1335					
14. 39	31. 40	10. 12	·1329					
	***	10. 34	·1331					
15. 25	31. 30	10. 49	·1337					
16. 13	32. 45	11. 18	·1329					
17. 25	32. 0	11. 25	·1331					
17. 33	31. 20	11. 35	·1327					
18. 27	30. 30	12. 25	·1337					
18. 37	29. 55	13. 12	·1328					
19. 1	29. 30	13. 33	·1327					
19. 9	28. 35	14. 44	·1329					
19. 16	29. 30	14. 52	·1333					
19. 24	28. 35	14. 57	·1329					
19. 28	29. 15	15. 24	·1333					
19. 38	27. 20	15. 40	·1330					
19. 43	29. 15	16. 29	·1335					
20. 0	29. 15	17. 36	·1332					
20. 9	28. 25	18. 24	·1336					
20. 16	28. 40		***					
20. 29	28. 5	19. 23	·1330					
20. 47	29. 25	19. 32	·1333					
20. 56	28. 50		***					
21. 37	30. 30	20. 45	·1330					
22. 10	32. 30	21. 7	·1324					
22. 50	33. 25	21. 42	·1319					
22. 59	34. 30	22. 13	·1323					
23. 10	34. 30	23. 0	·1316					
23. 53	37. 0	23. 10	·1323					
23. 59	37. 5	23. 42	·1318					
		23. 59	·1320					
Apr. 8		Apr. 8		Apr. 8		Apr. 8		
0. 0	20. 37. 5	0. 0	·1320	0. 0	·03175	0. 0	58 ·2	59 ·3
0. 28	38. 15	0. 45	·1323	2. 32	·03225	1. 0	58 ·3	59 ·8

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 8		Apr. 8		Apr. 8		Apr. 8		
h m	° ′ ″	h m		h m		h m	°	°
0. 47	20. 38. 25	2. 16	·1318	3. 11	{ ·03230	2. 0	58 ·0	59 ·9
0. 54	39. 40	3. 5	·1327		·03215	3. 0	58 ·0	60 ·0
1. 51	37. 45	3. 31	·1325	5. 12	·03240	Max.	59 ·3	61 ·7
2. 32	37. 30	3. 49	·1333	5. 31	·03235	9. 0	58 ·8	61 ·0
4. 57	34. 40	4. 40	·1326	6. 5	·03257	Min.	57 ·2	58 ·0
5. 10	33. 30	4. 44	·1330	8. 1:	·03245	22. 0	57 ·8	58 ·0
5. 30	27. 40	5. 2	·1325	11. 53	·03255			
5. 41	27. 30	5. 15	·1327	19. 0	·03217			
6. 42	33. 10	5. 34	·1316	20. 30	·03206			
11. 0	32. 40	5. 56	·1332	22. 54	·03170			
11. 31	32. 55	6. 11	·1333	23. 59	·03160			
12. 9	31. 30	6. 27	·1329					
12. 52	31. 55	6. 40	·1332					
13. 34	33. 5	6. 48	·1328					
13. 42	32. 30	7. 35	·1335					
14. 10	32. 30	7. 56	·1332					
14. 23	32. 45	8. 6	·1336					
15. 9	32. 20	9. 18	·1331					
16. 7	32. 40	10. 36	·1334					
16. 46	32. 25	11. 15	·1331					
18. 54	30. 15	11. 29	·1335					
19. 3	29. 25	12. 40	·1336					
20. 9	28. 50	13. 8	·1330					
21. 0	29. 25	13. 39	·1333					
22. 15	33. 30	13. 49	·1330					
22. 25	33. 25	15. 0	·1331					
22. 54	35. 30	15. 20	·1327					
22. 58	35. 15	16. 56	·1333					
23. 8	36. 30	18. 50	·1333					
23. 59	38. 20	19. 15	·1327					
		19. 40	·1331					
		20. 59	·1321					
		21. 39	·1319					
		22. 3	·1309					
		22. 16	·1314					
		22. 32	·1310					
		23. 59	·1315					
Apr. 9		Apr. 9		Apr. 9		Apr. 9		
0. 0	20. 38. 20	0. 0	·1315	0. 0	·03160	Min.	57 ·4	58 ·6
0. 26	38. 40	2. 38	·1328	3. 45	·03215	1. 0	57 ·8	59 ·4
1. 25	40. 30	2. 47	·1324	9. 33	·03235	9. 0	58 ·0	59 ·9
2. 28	39. 0	3. 8	·1329	15. 22	·03230	21. 0	58 ·4	59 ·3
2. 46	38. 5	3. 32	·1325	19. 26	·03220	Max.	59 ·2	61 ·1
6. 26	33. 0	3. 49	·1329	23. 59	·03170			
6. 41	33. 30	4. 12	·1323					
7. 11	32. 25	4. 47	·1329					
7. 53	32. 0	5. 33	·1327					
11. 4	32. 45	6. 15	·1332					
12. 11	33. 5	6. 42	·1330					
14. 38	32. 55	7. 38	·1335					
14. 57	33. 40	10. 17	·1331					
15. 31	32. 25	11. 21	·1334					
16. 9	33. 35	11. 57	·1331					
16. 28	32. 30	12. 28	·1332					
16. 40	32. 55	13. 49	·1328					
16. 54	32. 0	15. 10	·1331					
17. 24	32. 35	15. 48	·1331					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 9		Apr. 9						
h m	° ′ ″	h m		h m		h m	°	°
19. 14	20. 28. 30	16. 40	·1332					
20. 21:	28. 0	17. 13	·1330					
21. 26	29. 15	18. 5	·1334					
23. 59	39. 40	19. 43	·1329					
		21. 56:	·1313					
		23. 59	·1318					
Apr.10		Apr.10		Apr.10		Apr.10		
0. 0	20. 39. 40	0. 0	·1318	0. 0	·03170	1. 0	58 ·7	60 ·3
0. 39	41. 15	2. 12	·1331	2. 15	·03220	3. 0	58 ·7	60 ·5
2. 24	39. 10	2. 53	·1331	5. 34	·03250	Max.	59 ·2	61 ·2
3. 10	37. 5	3. 17	·1334	12. 11	·03240	9. 0	58 ·6	60 ·1
4. 43	34. 5	3. 43	·1331	17. 15	·03210	Min.	56 ·6	57 ·8
6. 1	32. 25	5. 17	·1332	18. 34	·03205	21. 0	57 ·4	58 ·0
12. 0	33. 5	6. 10	·1336	22. 27	·03140			
17. 23	31. 50	6. 19	·1334	23. 59	·03135			
20. 40	26. 35	6. 38	·1335					
21. 26	28. 30	7. 13	·1333					
23. 59	39. 25	8. 31	·1336					
		8. 49	·1331					
		9. 59	·1336					
		12. 11	·1332					
		16. 0	·1333					
		18. 36:	·1337					
		22. 8	·1312					
		23. 2	·1311					
		23. 59	·1319					
Apr.11		Apr.11		Apr.11		Apr.11		
0. 0	20. 39. 25	0. 0	·1319	0. 0	·03135	1. 0	57 ·8	59 ·8
0. 28	40. 5	3. 12	·1334	0. 24	·03140	3. 0	58 ·2	59 ·7
1. 39	41. 30	3. 34	·1340	3. 15	·03210	Max.	58 ·7	60 ·7
2. 13	40. 30	3. 53	·1337	4. 54	·03212	9. 0	58 ·1	59 ·9
3. 14	38. 5	4. 11	·1339	9. 10	·03220	21. 0	57 ·3	58 ·0
3. 24	38. 55	4. 25	·1337	14. 56	·03210	Min.	57 ·1	57 ·8
5. 30	33. 45	6. 0	·1340	15. 8	·03200	22. 0	57 ·1	57 ·8
6. 18	33. 20	6. 12	·1341	15. 16	·03208	23. 0	57 ·1	57 ·9
7. 26	33. 5	6. 19	·1340	16. 30	·03200			
8. 18	33. 25	6. 57	·1343	17. 25:	·03175			
11. 12	32. 55	7. 11	·1342	18. 28	·03180			
11. 40	29. 35	8. 51	·1345	20. 24	·03170			
11. 58	29. 25	9. 39	·1342	21. 53	·03140			
12. 42	31. 0	9. 46	·1345	22. 40	·03130			
13. 9	31. 0	11. 18	·1343	23. 59	·03140			
13. 23	31. 50	11. 30	·1339					
13. 55	30. 0	11. 35	·1343					
14. 31	30. 30	11. 41	·1341					
14. 52	30. 10	11. 48	·1345					
14. 58	30. 30	11. 57	·1340					
15. 2	29. 5	12. 4	·1343					
15. 23	31. 30	12. 27	·1339					
15. 27	30. 30	12. 33	·1342					
15. 53	30. 30	12. 49	·1336					
16. 26	33. 35	13. 48	·1339					
16. 54	31. 20	13. 53	·1334					
17. 25	30. 30	14. 10	·1336					
17. 37	29. 30	14. 13	·1333					
17. 52	29. 50	14. 19	·1337					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.11		Apr.11						
h m	° ′ ″	h m		h m		h m	°	°
18. 24	20. 28. 30	14. 50	·1333					
18. 31	26. 30	14. 54	·1336					
18. 39	27. 10	15. 1	·1325					
18. 40	27. 0	15. 16	·1335					
18. 52	27. 50	15. 18	·1328					
18. 59	26. 10	15. 26	·1332					
19. 11	26. 35	15. 33	·1330					
19. 38	25. 40	16. 13	·1330					
19. 58	26. 20	16. 32	·1339					
20. 27	26. 20	16. 45	·1337					
	***	17. 6	·1339					
21. 26	29. 0	17. 49	·1333					
21. 59	31. 0	18. 28	·1330					
22. 9	32. 5	18. 41	·1335					
22. 13	32. 5	19. 2	·1331					
22. 27	34. 50	19. 12	·1333					
22. 50	36. 30	20. 1	·1331					
22. 56	35. 35	20. 57	·1320					
23. 9	37. 5	21. 6	·1322					
23. 11	37. 5	21. 26	·1316					
23. 39	42. 30	21. 45	·1319					
23. 59	43. 20	22. 4	·1312					
		22. 21	·1319					
		22. 48	·1314					
		22. 53	·1304					
		23. 6	·1311					
		23. 10	·1306					
		23. 34	·1318					
		23. 47	·1316					
		23. 59	·1317					
Apr.12		Apr.12		Apr.12		Apr.12		
0. 0	20. 43. 20	0. 0	·1317	0. 0	·03140	0. 0	57 ·2	58 ·6
0. 26	43. 35	0. 18	·1312	1. 55	·03190	1. 0	57 ·6	59 ·1
0. 41	45. 30	0. 35	·1317	4. 34	·03223	2. 0	57 ·6	59 ·4
0. 58	44. 25	0. 53	·1311	5. 3:	·03255	3. 0	57 ·5	59 ·6
1. 9	44. 50	1. 4	·1317	5. 41	·03240	Max.	58 ·0	60 ·2
1. 22	44. 30	1. 32	·1318	6. 0	·03244	9. 0	57 ·7	59 ·0
1. 41	43. 55	1. 43	·1323	6. 16	·03235	Min.	56 ·1	57 ·8
1. 56	43. 40	2. 0	·1335	8. 36	·03235	21. 0	56 ·5	57 ·8
	(†)	2. 19	·1334	9. 34	·03210	22. 0	57 ·1	58 ·0
3. 20	44. 41*	2. 39	·1343	9. 41	·03210	23. 0	57 ·1	58 ·4
3. 22	44. 45	2. 46	·1333	9. 57	·03182			
3. 31	44. 45	2. 48	·1334	10. 2	·03190			
3. 46	42. 5	3. 9	·1322	10. 50	·03156			
4. 7	40. 25	3. 14	·1329	11. 21:	·03135			
4. 16	40. 25	3. 34	·1341	12. 3	·03150			
4. 23	40. 50	3. 52	·1323	12. 33	·03150			
4. 32	37. 55	4. 11	·1319	12. 41	·03140			
4. 52	29. 30	4. 19	·1323	13. 4	·03080			
5. 16	35. 5	4. 44	·1313	13. 50	·03100			
5. 31	34. 25	5. 11	·1342	14. 11	·03110			
5. 41	35. 30	5. 33	·1331	15. 6	·03115			
5. 47	35. 30	5. 44	·1331	15. 21	·03110			
6. 3	36. 40	5. 51	·1329	16. 21	·03123			
6. 11	36. 25	6. 4	·1333	17. 11	·03130			
6. 16	35. 20	6. 18	·1322	17. 40	·03120			
6. 41	36. 0	6. 45	·1318	19. 0:	·03135			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

April 12^{d}. 2^{h}. 0^{m}. to 3^{h}. 15^{m}. The Declination Magnet was removed from its stirrup and the brass bar was inserted.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr.12		Apr.12		Apr.12				
h m	° ′ ″	h m		h m		h m	°	°
7. 12	20. 34. 10	7. 15	·1322	20. 59	·03110			
7. 27	34. 30	7. 47	·1318	23. 59	·03110			
7. 57	31. 20	7. 59	·1321					
8. 21	32. 45	8. 13	·1317					
8. 39	31. 25	8. 26	·1321					
9. 1	31. 15	8. 49	·1315					
9. 13	33. 50	8. 56	·1318					
9. 22	18. 30	9. 25	·1313					
9. 42	25. 20	9. 42	·1354					
9. 57	19. 30	9. 56	·1327					
10. 44	26. 20	10. 13	·1336					
11. 13	15. 55	10. 19	·1333					
11. 34	20. 30	10. 26	·1335					
11. 49	21. 45	10. 40	·1327					
12. 53	36. 50	10. 49	·1328					
13. 14	35. 35	11. 0	·1316					
13. 52	29. 35	11. 16	·1307					
14. 4	26. 40	11. 33	·1308					
14. 32	25. 55	11. 50	·1302					
15. 11	32. 5	12. 0	·1304					
15. 38	28. 20	12. 26	·1303					
15. 50	28. 35	12. 46	·1352					
16. 21	27. 30	13. 18	·1322					
16. 32	29. 30	13. 39	·1323					
17. 10	33. 25	13. 55:	·1318					
17. 25	33. 25	14. 18	·1324					
17. 39	34. 30	14. 50	·1316					
17. 43	34. 0	14. 57	·1320					
18. 11	34. 20	15. 7	·1317					
18. 40	30. 40	15. 34	·1325					
18. 55	31. 25	16. 0	·1323					
19. 9	30. 35	16. 6	·1320					
19. 38	31. 30	16. 23	·1319					
20. 9	30. 0	16. 47	·1304					
20. 28	32. 5	16. 58	·1304					
20. 40	32. 30	17. 30	·1329					
20. 51	31. 55	18. 8	·1325					
22. 25	37. 35	18. 14	·1321					
23. 3	38. 25	18. 49	·1323					
23. 37	40. 25	19. 55	·1315					
23. 40	41. 45	20. 38	·1315					
23. 51	41. 5	21. 2	·1312					
23. 59	41. 30	21. 56	·1304					
		23. 32	·1307					
		23. 41	·1311					
		23. 48	·1307					
		23. 59	·1310					
Apr.13		Apr.13		Apr.13		Apr.13		
0. 0	20. 41. 30	0. 0	·1310	0. 0	·03110	0. 0	57·6	59·0
1. 33	43. 25	0. 32	·1313	1. 23	·03140	1. 0	57·6	59·6
2. 4	42. 5	1. 7	·1318	2. 30	·03180	2. 0	57·7	59·8
2. 21	42. 5	1. 21	·1316	3. 31	·03200	3. 0	57·9	59·8
2. 40	40. 45	1. 50	·1317	5. 11	·03210	Max.	58·3	60·4
3. 3	41. 30	2. 29	·1322	9. 47	·03210	9. 0	57·8	59·7
3. 54	38. 20	2. 52	·1315	10. 2	·03205	Min.	57·0	58·3
4. 4	38. 35	3. 25	·1328	10. 17	·03210	21. 30	57·4	58·5
4. 38	38. 20	4. 43	·1330	10. 54:	·03195			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr.13		Apr.13		Apr.13				
h m	° ′ ″	h m		h m		h m	°	°
5. 1	20. 37. 40	4. 58	·1326	11. 38	·03204			
5. 28	37. 55	5. 30	·1332	12. 50	·03200			
6. 1	36. 25	5. 46	·1320	17. 39	·03190			
6. 38	37. 0	6. 0	·1318	19. 27	·03180			
8. 25	35. 30	6. 20	·1323	22. 3	·03150			
8. 47	35. 30	6. 36	·1330	23. 59	·03150			
9. 13	29. 50	7. 25	·1324					
9. 40	28. 25	8. 2	·1330					
9. 56	31. 40	8. 30	·1326					
10. 9	30. 25	9. 4	·1329					
10. 26:	32. 55	9. 17	·1323					
10. 54	28. 40	9. 30	·1331					
11. 39	34. 0	9. 47	·1326					
12. 8	35. 10	10. 8	·1317					
12. 55	34. 30	10. 32	·1333					
13. 42	35. 20	11. 23	·1315					
15. 0	35. 0	12. 20	·1324					
15. 40	33. 25	14. 44	·1319					
15. 56	34. 0	16. 4	·1321					
16. 40	34. 15	16. 27	·1318					
17. 11	35. 30	17. 21	·1321					
18. 30	33. 40	17. 41	·1328					
19. 7	32. 20	18. 41	·1322					
19. 51	33. 5	19. 16	·1326					
20. 40	32. 30	21. 51	·1315					
22. 32	37. 40	22. 17	·1310					
22. 47	37. 40	23. 59	·1316					
23. 9	38. 30							
23. 29	40. 0							
23. 41	39. 45							
23. 47	40. 30							
23. 59	40. 30							
Apr.14		Apr.14		Apr.14		Apr.14		
0. 0	20. 40. 30	0. 0	·1316	0. 0	·03150	1. 0	57·4	58·6
0. 26	40. 30	0. 25	·1314	2. 43	·03190	Max.	58·2	59·7
0. 54	41. 30	0. 54	·1321	3. 50	·03190	8. 0	57·4	58·8
0. 57	42. 10	1. 4	·1319	5. 40	·03210	Min.	56·4	57·9
1. 8	41. 20	2. 17	·1325	6. 15	·03220	21. 0	57·2	58·5
2. 40	39. 35	2. 19	·1323	7. 11	·03230			
3. 55	36. 55	2. 53	·1327	10. 28	·03210			
4. 27	36. 25	4. 0	·1325	11. 1	·03190			
5. 38	36. 10	4. 10	·1329	13. 55	·03195			
5. 51	36. 50	4. 29	·1325	15. 46	·03170			
6. 10	37. 0	5. 32	·1334	16. 7	·03172			
6. 25	37. 40	5. 44	·1331	16. 54	·03165			
6. 39	37. 10	6. 12	·1339	19. 47	·03170			
6. 47	37. 35	6. 49	·1318	21. 31	·03146			
6. 54	36. 50	6. 57	·1319	23. 59	·03115			
7. 3	36. 50	7. 12	·1314					
7. 13	38. 10	7. 19	·1319					
7. 21	37. 5	7. 43	·1321					
7. 27	36. 45	7. 57	·1314					
7. 36	35. 10	8. 12	·1322					
7. 55	37. 45	8. 37	·1319					
8. 8	35. 35	9. 16	·1326					
8. 15	35. 35	10. 14	·1321					
8. 22	36. 5	10. 26	·1325					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 14		Apr.14						
h m	° ′ ″	h m		h m		h m	°	°
8. 40	20. 35. 40	10. 44:	·1344					
9. 13	36. 20	11. 13	·1322					
9. 57	34. 35	11. 36	·1318					
10. 13	35. 30	11. 40	·1321					
10. 25	33. 0	12. 15	·1317					
10. 35	26. 35	12. 27	·1321					
10. 54	31. 10	13. 43	·1317					
10. 59	31. 25	14. 12	·1325					
11. 12	33. 15	14. 29	·1320					
11. 29	32. 55	15. 31	·1326					
11. 40	32. 25	15. 50	·1321					
12. 25	34. 55	16. 32	·1326					
12. 58	34. 20	16. 43	·1322					
13. 29	34. 35	17. 25	·1327					
13. 40	35. 30	19. 40	·1320					
13. 53	37. 30	19. 53	·1317					
14. 9	37. 30	21. 59	·1307					
14. 16	38. 20	23. 18	·1308					
14. 26	36. 45	23. 59	·1314					
14. 59	36. 0							
15. 23	33. 55							
15. 41	33. 30							
16. 2	36. 10							
16. 26	34. 25							
17. 18	34. 35							
17. 31	33. 30							
18. 9	32. 25							
18. 21	32. 30							
18. 35	32. 0							
18. 41	32. 30							
19. 9	31. 30							
19. 37	32. 50							
20. 2	32. 0							
20. 54	34. 0							
21. 12	34. 0							
21. 47	35. 30							
21. 58	35. 0							
22. 57	37. 5							
23. 27	37. 30							
23. 43	38. 35							
23. 59	39. 5							
Apr.15		Apr.15		Apr.15		Apr.15		
0. 0	20. 39. 5	0. 0	·1314	0. 0	·03115	1. 0	57 ·0	58 ·9
1. 4	40. 0	0. 53	·1319	0. 59	·03142	3. 0	57 ·4	59 ·0
1. 33	43. 5	1. 18	·1337	1. 55	·03170	Max.	57 ·4	59 ·1
1. 55	43. 5	1. 43	·1331	2. 26	·03160	9. 0	57 ·2	59 ·0
2. 11	43. 45	1. 57	·1330	2. 48	·03180	Min.	55 ·8	57 ·0
2. 26	42. 0	2. 12	·1334	3. 10	·03170	22. 0	55 ·8	57 ·2
2. 37	40. 55	2. 46	·1320		·03190			
2. 47	41. 0	3. 12	·1332	5. 30	·03230			
2. 56	42. 10	3. 26	·1323	6. 3	·03250			
3. 9	41. 35		***	7. 19	·03265			
3. 57	41. 20	4. 14	·1331	7. 28	·03252			
4. 8	40. 30	4. 25	·1339	7. 35	·03257			
4. 24	41. 10	4. 37	·1338	8. 2	·03217			
4. 31	40. 30	4. 52	·1343	10. 27	·03206			
4. 47	41. 35	5. 3	·1340	10. 54	·03170			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr.15		Apr.15		Apr.15				
h m	° ′ ″	h m		h m				
4. 54	20. 41. 0	5. 11	·1341	11. 7	·03174			
5. 11	42. 0	5. 49	·1329	11. 49	·03165			
5. 27	41. 40	6. 26	·1334	11. 58	·03170			
5. 54	39. 25	6 29	·1330	12. 18	·03150			
6. 30	37. 10	6. 45	·1329	14. 46	·03176			
6. 38	37. 10	6. 58	·1320	15. 30	·03170			
7. 11	30. 40	7. 7	·1322	15. 46	·03146			
7. 19	31. 20	7. 10	·1316	16. 41	·03100			
7. 26	27. 15	7. 33	·1328	18. 18	·03085			
7. 39	34. 20	7. 48	·1359	18. 28	·03100			
7. 55	35. 50	8. 15	·1320	19. 17	·03100			
8. 5	34. 0	8. 23	·1325	19. 45	·03097			
8. 22	35. 15	8. 48	·1327	20. 8	·03110			
9. 9	33. 0	8. 56	·1325	22. 0	·03097			
9. 28	30. 0	9. 12	·1329	23. 59	·03100			
9. 58	31. 0	9. 37	·1321					
10. 18	35. 10	10. 17	·1322					
10. 25	35. 25	10. 36:	·1330					
10. 33	30. 5	10. 52	·1325					
10. 48	22. 55	11. 18:	·1339					
10. 56	22. 55	11. 34	·1318					
11. 13	28. 5	11. 48	·1311					
11. 38	35. 15	12. 11:	·1332					
11. 54	31. 0	12. 40	·1335					
12. 8	28. 50	13. 4	·1327					
13. 9	29. 10	13. 14	·1330					
13. 11	27. 55	13. 39	·1322					
13. 29	27. 55	14. 2	·1320					
13. 55	30. 50	14. 30	·1323					
14. 27	32. 20	14. 39	·1318					
14. 33	31. 15	15. 0	·1325					
14. 43	32. 10	15. 6	·1323					
15. 9	32. 20	15. 14	·1325					
15. 35	39. 40	15. 18	·1322					
15. 43	38. 20	16. 4	·1339					
15. 55	39. 20	16. 7	·1337					
16. 8	42. 50	16. 27	·1348					
16. 11	42. 50	16. 35	·1346					
16. 18	43. 55	17. 3:	·1351					
16. 32	43. 55	17. 35	·1335					
16. 52	38. 15	18. 2:	·1340					
17. 5	37. 25	18. 22	·1329					
17. 17	38. 10	18. 41	·1331					
17. 32	39. 30	19. 17	·1325					
17. 49	36. 0	19. 30	·1316					
18. 8	31. 25	19. 43	·1304					
18. 13	30. 30	20. 7	·1305					
18. 22	29. 30	20. 23	·1295					
18. 43	31. 5	20. 32	·1295					
18. 58	31. 5	21. 10	·1272					
19. 17	33. 0	22. 4	·1287					
19. 23	34. 30	22. 25	·1282					
19. 27	32. 5	23. 2	·1288					
19. 36	32. 45	23. 43	·1305					
19. 42	31. 30	23. 59	·1304					
19. 54	31. 35							
19. 58	31. 0							
20. 6	33. 5							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 18		Apr. 18		Apr. 18				
h m		h m		h m				
3. 32	20. 43 0	4. 12	·1336	13. 18	·03370			
3. 47	43. 30	4. [illegible]	·13[illegible]2	14. 25	·03400			
3. 53	42. 40	4. 53	·1338	15. 15	·03390			
4. 9	44. 0	4. 58	·1307	15. 33	·03395			
4. 23	42. 55	5. 1[illegible]	·1330	16. 30:	·03340			
4. 28	39. 5	5. 30	·1334	17. 11	·03360			
4. 39	19. 45	5. [illegible]	·1328	18. 4	·03380			
4. 54	34. 20	6. 27	·1331	18. 49	·03390			
4. 58	34. 20	6. 42	·1337		***			
5. 2	35. 5	7. 4	·1331	19. 33	·03400			
5. 9	35. 5	7. 14	·1337	20. 37	·03390			
5. 13	36. 55	7. 29	·1331	22. 3	·03400			
5. 24	36. 55	7. 57	·1336	23. 59	·03382			
5. 30	38. 15	8. 10	·1334					
5. 43	38. 40	8. 21	·1325					
5. 56	37. 35	8. 40	·1339					
6. 9	37. 40	9. 10	·1322					
6. 25	36. 25	9. 39	·1331					
6. 39	36. 35	9. 58	·1327					
6. 57	36. 0	10. 12	·1331					
7. 14	35. 50	10. 26	·1326					
7. 29	34. 10	11. 35	·1339					
7. 57	35. 0	11. 41	·1334					
8. 8	33. 0	11. 47	·1343					
8. 11	33. 0	12. 4	·1331					
8. 29	24. 30	12. 25	·1337					
8. 43	27. 5	12. 40	·1337					
9. 8	28. 15	12. 56	·1329					
9. 23	30. 35	13. 11	·1330					
9. 31	29. 30	13. 22	·1335					
9. 58	31. 50	13. 46	·1322					
10. 6	33. 5	14. 4	·1325					
10. 45	33. 25	14. 23	·1325					
11. 44	37. 20	14. 40	·1331					
11. 59	43. 55	14. 54	·1328					
12. 15	34. 10	15. 5	·1320					
12. 38	37. 20	15. 20	·1319					
12. 54	33. 0	16. 10	·1328					
13. 10	31. 25	16. 43	·1319					
13. 24	32. 35	16. 53	·1327					
13. 52	31. 30	17. 11	·1334					
13. 59	29. 55	17. 17	·1327					
14. 13	30. 25	18. 2	·1337					
14. 26	29. 10	18. 13	·1325					
14. 41	26. 50	18. 26	·1331					
15. 6	32. 15	18. 38	·1319					
15. 14	33. 20	18. 45	·1320					
15. 29	36. 55	19. 2	·1310					
15. 41	37. 20	19. 13	·1315					
16. 0	39. 30	19. 17	·1310					
16. 24	39. 50	19. 24	·1316					
16. 40	33. 50	19. 49	·1310					
16. 57	33. 35	20. 12	·1317					
17. 8	36. 5	21. 0	·1312					
17. 11	33. 10	21. 19	·1303					
17. 41	30. 30	21. 26	·1308					
17. 58	31. 40	21. 37	·1297					
18. 9	29. 20	21. 46	·12[illegible]					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 18		Apr. 18						
h m	° ′ ″	h m				h m		°
18. 17	20. 31. 25	22. 10	·1319					
18. 28	30. 45	22. 14	·1315					
18. 39	31. 35	22. 24	·1320					
18. 54	28. 55	22. 41	·1315					
19. 6	29. 30	22. 55	·1319					
19. 9	28. 30	23. 26	·1317					
	***	23. 41	·1315					
20. 14	33. 40	23. 59	·1323					
20. 47	32. 0							
21. 21	33. 0							
21. 26	35. 50							
21. 34	34. 0							
21. 39	35. 0							
21. 53	32. 5							
22. 0	32. 30							
22. 5	34. 35							
22. 10	33. 35							
22. 26	35. 50							
	(†)							
Apr. 19		Apr. 19		Apr. 19		Apr. 19		
	(†)	0. 0	·1323	0. 0	·03[illegible]2	0. 0	58 ·8	60 ·6
0. 26	20. 39. 0	0. 26	·1317	0. 55	·03404	1. 0	59 ·0	60 ·9
0. 55	39. 55	0. 38	·1322	2. 57	·03410	2. 0	59 ·0	61 ·3
1. 1	39. 0	1. 4	·1325	3. 13	·03453	3. 0	59 ·1	61 ·1
1. 56	39. 30	1. 35	·1313	3. 17	·03446	Max.	60 ·0	61 ·4
2. 4	38. 55		***	3. 39	·03460	9. 0	59 ·5	61 ·2
2. 28	40. 15	2. 4	·1305	4. 30	·03435	21. 0	58 ·6	59 ·7
2. 46	39. 25	2. 40	·1313	5. 32	·03427	22. 0	58 ·7	59 ·9
2. 58	30. 55	2. 58	·1283	6. 33	·03437	23. 0	58 ·3	59 ·6
3. 11	29. 30	3. 11	·1316	7. 43	·03455	Min.	58 ·3	59 ·5
3. 14	27. 35		***	8. 46	·03430			
3. 39	33. 55	3. 29	·1323	8. 57	·03437			
3. 55	35. 30	3. 49	·1316	9. 15	·03420			
4. 31	37. 0	4. 28	·1315	9. 41	·03410			
4. 40	36. 40	4. 40	·1323	10. 3	·03370			
4. 53	37. 0	4. 49	·1318	10. 28	·03366			
4. 56	36. 35	5. 12	·1317	10. 57	·03390			
5. 13	36. 35	5. 25	·1321	12. 8	·03398			
5. 59	35. 40	5. 31	·1318	12. 53	·03395			
6. 9	34. 35	5. 46	·1325	15. 10	·03390			
6. 22	34. 45	6. 22	·1323	16. 50	·03385			
6. 39	31. 10	6. 34	·1317	18. 35	·03392			
6. 59	31. 30	6. 43	·1321	19. 13	·03390			
7. 11	27. 30	7. 14	·1306	20. 38	·03370			
7. 16	28. 35	7. 40	·1310	21. 7	{·03365			
7. 26	28. 40	7. 52	·1322		·03386			
7. 38	28. 0	8. 12	·1317	23. 13	·03360			
8. 4	32. 45	8. 35	·1318	23. 59	·03370			
8. 39	33. 35	8. 50	·1313					
8. 55	25. 30	9. 10	·1331					
9. 9	27. 50	9. 22	·1320					
9. 13	27. 55	9. 27	·1323					
9. 25	33. 5	9. 34	·1318					
9. 29	34. 35	9. 49	·1357					
9. 38	29. 10	10. 10	·1324					
9. 44	36. 0	10. 14	·1324					
9. 58	37. 30	10. 31	·1312					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

April 18^{d}. After 22^{h}. 30^{m}. damper experiments with the Declination Magnet were in progress.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.19		Apr.19						
h m	° ′ ″	h m		h		h		
10. 10	20. 33. 25	10. 43	·1317					
10. 16	33. 10	10. 48	·1314					
10. 36	26. 30	11. 1	·1320					
10. 46	25. 30	11. 25	·1309					
11. 13	29. 25	12 8	·1310					
11. 26	29. 30	12. 51	·1317					
11. 49	30. 25	13. 14	·1311					
12. 12	33. 30	13. 37	·1316					
12. 25	33. 0	14. 26	·1313					
12. 56	33. 30	14. 35	·1315					
13. 16	35. 35	15. 12	·1313					
13. 55	33. 5	15. 23	·1307					
14. 17	33. 0	16. 19	·1308					
14. 25	32. 35	17. 17	·1315					
14. 27	33. 35	17. 25	·1312					
14. 35	33. 35	17. 35	·1314					
14. 41	32. 5	18. 20	·1304					
15. 9	33. 0	18. 39	·1309					
15. 16	32. 15	18. 50	·1308					
15. 28	33. 40	19. 35	·1313					
15. 56	34. 10		***					
16. 24	32. 35	21. 7	·1305					
16. 39	33. 30	21. 17	·1319					
16. 56	32. 0	23. 40	·1319					
17. 38	31. 35	23. 59	·1324					
17. 55	30. 20							
18. 5	31. 20							
18. 9	31. 20							
18. 17	29. 25							
18. 38	30. 35							
18. 51	29. 30							
19. 11	29. 35							
19. 20	29. 5							
19. 54	30. 0							
20. 11	30. 0							
20. 41	31. 5							
20. 47	32. 25							
20. 58	32. 35							
21. 9	32. 5							
21. 12	33. 20							
22. 13	35. 30							
	(†)							
Apr.20		Apr.20		Apr.20		Apr.20		
	(†)	0. 0	·1324	0. 0	·03370	0. 0	58 ·4	59 ·2
0. 26	20. 37. 30	0. 27	·1306	0. 39	·03380	1. 0	58 ·7	60 ·7
1. 1	37. 30	1. 25	·1315	2. 54	·03417	2. 0	59 ·2	62 ·8
1. 43	36. 0	1. 51	·1310	3. 40	·03440	3. 0	59 ·1	62 ·9
2. 9	36. 0	2. 27	·1318	5. 26	·03456	Max.	60 ·0	63 ·5
2. 26	36. 35		***	6. 45	·03467	9. 0	59 ·7	62 ·0
2. 54	36. 0	3. 34	·1313	7. 47	·03460	Min.	57 ·6	59 ·2
3. 11	35. 30	3. 48	·1317	8. 56	·03457	21. 0	57 ·8	59 ·5
3. 27	35. 15	4. 32	·1314	9. 55	·03430			
4. 29	35. 30	4. 51	·1308	16. 49	·03395			
4. 43	34. 40	5. 7	·1311	18. 3	·03380			
5. 8	33. 50	5. 18	·1314	22. 15	·03350			
5. 16	34. 15	5. 26	·1311	23. 59	·03350			
5. 55	33. 25	5. 40	·1317					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.20		Apr.20						
h m	° ′ ″	h m		h				
6. 17	20. 35. 0	5. 51	·1313					
6. 25	34. 55	6. 16	·1319					
6. 38	35. 5	6. 54	·1312					
6. 52	33. 55	6. 57	·1315					
7. 8	34. 5	7. 10	·1309					
7. 12	33. 30	7. 21	·1309					
7. 24	34. 0	7. 26	·1305					
7. 29	33. 30	7. 34	·1309					
7. 38	34. 0	7. 45	·1310					
7. 57	32. 35	8. 8	·1319					
8. 11	34. 0	8. 54	·1306					
8. 55	33. 25	9. 15	·1319					
9. 9	30. 55	9. 34	·1319					
9. 16	30. 55	9. 49:	·1326					
9. 26	25. 30	10. 4	·1317					
9. 40	26. 15	10. 20	·1316					
9. 58	28. 35	10. 42	·1304					
10. 10	27. 30	10. 57	·1307					
10. 27	30. 25	11. 28	·1303					
10. 41	29. 35	11. 38	·1308					
10. 56	30. 5	11. 42	·1303					
10. 59	31. 0		***					
11. 24	30. 55	16. 24	·1310					
11. 28	31. 50	17. 8	·1305					
11. 43	31. 35	18. 7	·1311					
12. 0	32. 30	18. 14	·1308					
12. 58	33. 20	19. 10	·1314					
13. 31	33. 0	20. 1	·1304					
14. 0	32. 20	20. 42	·1303					
14. 46	32. 10	21. 6	·1307					
15. 21	31. 50	22. 41	·1303					
15. 38	30. 50	23. 59	·1306					
15. 47	31. 10							
16. 35	30. 30							
16. 54	32. 40							
17. 9	32. 55							
17. 13	33. 30							
17. 38	33. 0							
17. 56	33. 55							
18. 9	32. 50							
18. 26	32. 25							
18. 35	32. 55							
19. 8	31. 35							
19. 25	31. 20							
19. 39	30. 0							
19. 54	30. 35							
20. 14	30. 55							
21. 24	33. 15							
21. 53	33. 5							
22. 57	36. 0							
	(†)							
23. 59	37. 35							
Apr.21		Apr.21				21		
0. 0	20. 37. 35	0. 0	·1306	0. 0	·03350	1. 0	58 ·7	61 ·6
1. 11	38. 55	1. 18	·1304	3. 1	·03417	3. 0	58 ·8	61 ·8
2. 28	36. 55	3. 25	·1311	3. 37	·03412	Max.	60 ·2	62 ·0
3. 13	36. 30	3. 52	·1306	7. 18	·03435	9. 0	59 ·5	62 ·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

April 19d. 22h. 20m. to April 20d. 0h. 20m. Damper experiments with the Declination Magnet were in progress.

April 20d. 23h. 0m. to 23h. 59m. A series of damper experiments with the Declination Magnet.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Apr. 21		Apr. 21		Apr. 21		Apr. 21		
h m	° ′ ″	h m		h m		h m	°	°
3. 39	20. 35. 30	4. 43	·1315	9. 2	·03440	Min.	58 ·2	59 ·7
4. 27	35. 30	5. 16	·1312	9. 24	·03440	21. 0	59 ·4	60 ·6
5. 5	34. 45	6. 43	·1318	9. 41	·03440			
7. 4	34. 30	7. 0	·1316	10. 9	·03450			
7. 11	34. 45	7. 14	·1318	11. 0:	·03442			
7. 47	33. 30	7. 23	·1325	11. 48	·03450			
9. 11	33. 10	8. 5	·1312	12. 46:	·03425			
9. 37	25. 25	8. 52	·1316	13. 50	·03423			
9. 52	27. 10	9. 46	·1314	15. 33	·03420			
9. 57	27. 10	9. 54	·1309	17. 23	·03410			
10. 24	29. 30	10. 4	·1312	19. 56	·03400			
10. 55	30. 0	10. 26	·1315	20. 48	·03390			
11. 25	32. 25	11. 4:	·1306	23. 59	·03390			
12. 4	31. 40	11. 43	·1310					
12. 38	32. 20	12. 25	·1309					
13. 12	31. 0	12. 42	·1314					
13. 38	32. 5	13. 10	·1309					
13. 45	31. 30	13. 40	·1313					
13. 57	32. 35	13. 45	·1310					
14. 23	32. 55	15. 19	·1313					
14. 38	32. 25	15. 41	·1307					
15. 1	32. 0	16. 45	·1309					
15. 23	31. 30	18. 17	·1304					
16. 8	32. 35		***					
16. 43	32. 25	19. 52	·1305					
16. 56	31. 20	20. 11	·1299					
17. 10	31. 10	21. 12	·1291					
17. 13	31. 40	21. 42	·1291					
17. 30	31. 10	22. 5	·1297					
17. 42	29. 30	22. 50	·1294					
17. 59	30. 5	23. 43	·1303					
18. 23	29. 0	23. 59	·1301					
19. 41	29. 0							
19. 55	30. 15							
19. 59	29. 40							
20. 13	30. 5							
20. 43	30. 5							
20. 56	31. 30							
21. 42	33. 35							
22. 20	36. 20							
	(†)							
Apr. 22		Apr. 22		Apr. 22		Apr. 22		
0. 0	20. 40. 0	0. 0	·1301	0. 0	·03390	1. 0	59 ·1	62 ·0
0. 29	39. 30	0. 38	·1304	2. 14	·03430	3. 0	59 ·2	62 ·0
0. 51	40. 35	1. 26	·1313	3. 5	·03440	Max.	60 ·3	62 ·3
1. 50	38. 50	1. 30	·1304		·03430	9. 0	59 ·6	61 ·0
2. 14	39. 0	1. 36	·1312	5. 16	·03455	Min.	57 ·5	58 ·9
2. 53	36. 55	1. 40	·1307	5. 30	·03448	21. 35	58 ·8	60 ·3
3. 0	37. 20	2. 11	·1312	5. 55	·03453			
3. 9	36. 30	2. 46	·1307	6. 4	·03450			
3. 18	37. 20	3. 13	·1315	7. 30	·03456			
4. 3	36. 35		***	10. 53	·03422			
4. 26	36. 50	3. 49	·1316	11. 42	·03420			
4. 41	36. 35	4. 2	·1307	12. 8:	·03410			
4. 57	35. 30		***	12. 54	·03413			
5. 25	36. 0	4. 33	·1312	15. 46	·03395			
5. 40	33. 25	4. 52	·1306	20. 57	·03360			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Apr. 22		Apr. 22		Apr. 22				
h m	° ′ ″	h m		h m		h m	°	°
6. 9	20. 33. 30	5. 19	·1321	21. 20	·03345			
6. 26	30. 40	5. 25	·1317	21. 44	·03350			
7. 0	31. 40	5. 34	·1317	22. 41	·03346			
7. 24	31. 20	5. 43	·1323	23. 59	·03350			
7. 40	32. 55	5. 48	·1316					
8. 23	32. 45	5. 56	·1318					
8. 29	33. 20	6. 10	·1306					
8. 39	32. 50	6. 21	·1305					
8. 59	33. 30	6. 42	·1319					
9. 25	32. 35	7. 6:	·1314					
9. 34	30. 50	7. 20	·1320					
9. 41	30. 50	7. 41	·1313					
9. 58	29. 25	8. 28	·1317					
10. 9	29. 30	9. 7	·1310					
10. 21	31. 0	9. 49	·1312					
10. 38	32. 5	10. 4	·1310					
10. 57	31. 35	10. 27	·1316					
11. 33	37. 30	10. 34	·1313					
11. 51	34. 30	11. 3	·1313					
12. 14	32. 0	11. 30	·1318					
13. 59	32. 5	12. 8	·1316					
14. 51	32. 55	12. 26	·1312					
15. 43	31. 0	14. 37	·1313					
15. 53	31. 20	15. 2	·1316					
16. 9	30. 5	15. 26	·1316					
17. 8	30. 30	15. 34	·1319					
18. 0	27. 30	15. 42	·1315					
18. 56	26. 25	16. 20	·1315					
19. 15	27. 10	17. 42	·1324					
19. 24	26. 10		***					
19. 27	27. 10	19. 20	·1318					
19. 33	25. 30	19. 28	·1322					
19. 41	26. 30	19. 50	·1312					
19. 54	26. 0		***					
20. 0	26. 0	20. 40	·1313					
20. 9	26. 55	20. 48	·1308					
20. 11	26. 0	20. 58	·1310					
20. 23	26. 35	21. 32	·1298					
20. 26	26. 0	22. 33	·1297					
20. 38	26. 0	22. 49	·1303					
20. 43	27. 55	23. 1	·1297					
20. 51	26. 0	23. 32	·1306					
21. 0	28. 5	23. 59	·1299					
21. 16	27. 35							
21. 25	29. 30							
	***							
22. 13	33. 20							
22. 41	34. 30							
22. 52	36. 0							
22. 56	36. 55							
22. 59	36. 0							
23. 56	39. 35							
23. 59	40. 0							
Apr. 23		Apr. 23		Apr. 23		Apr. 23		
0. 0	20. 40. 0	0. 0	·1299	0. 0	·03350	1. 0	58 ·4	61 ·8
0. 17	40. 55	0. 23	·1307	3. 39	·03420	Max.	59 ·5	62 ·8
0. 46	41. 15	1. 0	·1302	7. 7	·03436	8. 30	59 ·3	62 ·7

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

April 21. From 22h. 20m. to 23h. 59m., damper experiments with the Declination Magnet were in progress.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 23		Apr. 23		Apr. 23		Apr. 23		
h m	° ′ ″	h m		h m		h m		
0.51	20.41.35	1.43	·1306	7.13	·03430	Min.	57°·3	59°·2
1.16	39. 0	2. 1	·1321	10.11	·03433	21. 0	57·8	60·0
1.44	39.30	2.40	·1313	13.52	·03417			
1.57	40.50	3.12	·1315	15.46	·03395			
2.16	40. 0	3.30	·1312	18.48	·03375			
2.27	39.50	3.44	·1318	18.57	·03380			
2.35	39.10	3.59	·1313	22.26	·03346			
3.31	37.35		***	23.59	·03370			
3.40	37.50	7.11	·1326					
3.51	36.55	7.25	·1319					
4.50	35. 0	7.38	·1321					
5.34	34.30	9. 4	·1321					
6. 8	33.35	9.15	·1327					
6.55	33.30	9.22	·1324					
7. 8	34. 5	9.27	·1325					
7.24	33.30	9.38	·1317					
9. 9	33.25	9.43	·1321					
9.27	32.35	10. 7	·1324					
10. 3	33.40	10.19	·1331					
10.54	31.35	10.48	·1330					
11. 1	32.30	11. 3	·1325					
12.16	30.30	11. 9	·1319					
12.55	31.55	11.26	·1322					
14. 3	32. 0	11.43	·1319					
14.18	32.55	12. 5	·1325					
14.39	31.35	12.15	·1321					
15.24	31.25	12.44	·1323					
15.29	32.10	12.57	·1317					
15.41	31.25	14. 9	·1322					
15.58	31.25	15. 8	·1319					
16.13	30.35	15.32	·1324					
17.11	30.25	16. 7	·1318					
18.10	28.30	18.35	·1316					
18.16	28.55		***					
18.46	27. 5	21.24	·1303					
18.57	28.40		***					
19.41	27.35	23.40	·1309					
20.40	29. 0	23.59	·1313					
21.10	31.25							
22.18	33.55							
23.59	38.15							
Apr. 24		Apr. 24		Apr. 24		Apr. 24		
0. 0	20.38.15	0. 0	·1313	0. 0	·03370	1. 0	58·3	61·1
0.23	39.20	0.30	·1319	4. 5	·03418	3. 0	58·7	62·0
0.34	38.35	0.34	·1317	6.46	·03430	Max.	60·2	62·2
0.46	39.10	0.48	·1323	9. 8	·03430	9. 0	58·8	61·0
	(†)		(†)	10. 7	·03410	Min.	56·8	58·0
1. 0	38.36*	1. 0	·1326*	11.23	·03390	21. 0	57·2	58·9
2.22	40. 5	2.13	·1325	12. 8	·03387			
2.34	40.10		***	14.31	·03376			
3. 0	39.30	3. 4	·1318	15.39	·03355			
3.14	38.20		***	16.40	·03350			
3.48	37.20	3.34	·1330	19.40	·03330			
4.11	37.35	3.56	·1326	22.15	·03280			
4.53	36.30	4. 5	·1328	23.59	·03290			
5.11	36.35	4.31	·1317					
5.33	36. 0	4.45	·1324					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 24		Apr. 24						
h m	° ′ ″	h m		h m		h m		
5.53	20.36. 0	4.52	·1320					
6.23	35.25	5.12	·1325					
6.31	36. 0	5.36	·1320					
6.34	35.25	5.44	·1323					
6.41	35.30	6.25	·1323					
7.29	30.30	6.37	·1330					
7.41	30.20	7. 3	·1321					
7.54	31.30	7.12	·1323					
8.16	31. 5	7.24	·1319					
8.35	31.55	7.39	·1319					
9.24	32. 0	7.55	·1323					
9.39	31.25	8. 4	·1322					
9.54	31.25	8.11	·1324					
10. 9	33. 5	8.40	·1317					
10.38	31.45	8.51	·1322					
10.56	33.50	8.54	·1319					
11. 9	31.35	9. 9	·1320					
11.38	31.30	10. 8	·1333					
12.14	32. 5	10.27	·1328					
14.12	30.30	10.48	·1325					
14.28	30.30	10.56	·1331					
14.46	32. 0	11.12	·1328					
15.17	32. 0	13.43	·1327					
15.42	30. 0	14.27	·1323					
16.11	30.35	15.20	·1328					
16.38	30. 5	15.51	·1325					
16.40	30.40	16. 4	·1329					
17.10	29.25	17. 2	·1322					
17.40	29.25	17.46	·1323					
19.57	28. 0	20.54	·1311					
21. 0	29.25	21.55	·1310					
21.56	32. 0	22.20	·1313					
23.51	37.20	22.49	·1308					
23.59	38.45		***					
		23.59	·1314					
Apr. 25		Apr. 25		Apr. 25		Apr. 25		
0. 0	20.38.45	0. 0	·1314	0. 0	·03290	1. 0	57·7	60·7
0.26	39.30	0.44	·1322	1.45	·03330	3. 0	57·8	60·9
1. 6	39.20	0.48	·1318	1.49	·03326	Max.	59·1	61·1
2. 2	39. 5	1.38	·1324	1.59	·03340	9. 0	58·2	61·0
2.40	37.35	1.48	·1331	3.18	·03350	Min.	56·5	58·4
3. 1	38. 5	1.54	·1323	4.39	·03370	21. 0	57·2	60·0
3.40	35.45	2. 0	·1326	5.15	·03366	22.30	57·2	59·8
4. 7	35.25	2. 4	·1337	7.23	·03380	23. 0	57·3	59·5
4.14	35.40	2. 7	·1327	10.25	·03375			
4.26	34.50	2.42	·1318	13.23	·03360			
4.54	34.50	3.10	·1325	20.24	·03320			
5.16	34.10		***	22.18	·03295			
6. 9	34.10	3.53	·1314	23.59	·03316			
7. 8	33. 0	4.44	·1329					
7.14	33.15	5.26	·1324					
7.23	32.40	6.13	·1330					
7.28	33.15	6.21	·1328					
7.39	32.35	6.32	·1332					
8.43	32.20	7. 0	·1329					
9.52	33. 5	7.18	·1333					
10.37	32. 0	7.42	·1326					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.25		Apr.25						
h m	° ′ ″	h m		h m		h m	°	°
10. 41	20. 32. 35	8. 15	·1329					
11. 25	31. 40	8. 45	·1326					
13. 8	34. 0	9. 0	·1328					
13. 17	32. 45	9. 42	·1325					
13. 39	33. 10	10. 9	·1329					
15. 1	31. 5	10. 50	·1325					
16. 16	30. 15	11. 14	·1328					
17. 22	30. 0	11. 20	·1327					
17. 30	29. 30	11. 52	·1329					
17. 39	29. 50	12. 43	·1326					
17. 45	29. 20	12. 57	·1330					
18. 40	28. 0	13. 14	·1326					
19. 41	28. 10	13. 37	·1330					
20. 25	29. 15	13. 43	·1325					
22. 26	36. 0	13. 53	·1329					
22. 38	37. 35	14. 10	·1326					
23. 8	39. 0	14. 25	·1329					
23. 26	41. 5	14. 57	·1323					
23. 59	41. 30	15. 3	·1326					
		15. 34	·1322					
		16. 4	·1324					
		16. 16	·1322					
		17. 35	·1325					
			***					
		21. 35	·1304					
			***					
		23. 59	·1309					
Apr.26		Apr.26		Apr.26		Apr.26		
0. 0	20. 41. 30	0. 0	·1309	0. 0	·03316	0. 0	57 ·3	59 ·8
0. 40	41. 35	0. 48	·1322	3. 14	·03357	1. 0	57 ·4	60 ·1
0. 42	40. 10	1. 27	·1310	7. 18	·03390	2. 0	57 ·4	60 ·2
1. 27	41. 0		***	8. 36	·03400	3. 0	57 ·8	60 ·4
2. 8	40. 20	4. 1	·1310	10. 53	·03386	Max.	59 ·6	61 ·7
4. 5	36. 25	4. 13	·1314	20. 6	·03355	9. 0	58 ·9	61 ·0
4. 11	36. 30	5. 25	·1312	22. 54	·03317	Min.	57 ·3	59 ·4
5. 22	34. 25	5. 30	·1319	23. 59	·03315	21. 0	58 ·4	59 ·8
5. 29	34. 55	5. 36	·1314			22. 0	58 ·0	59 ·9
5. 38	34. 0	6. 13	·1316			23. 0	58 ·7	60 ·6
6. 12	33. 50	6. 29	·1314					
6. 43	33. 0	6. 48	·1316					
6. 59	32. 35	7. 7	·1312					
7. 23	31. 10	9. 24	·1317					
7. 53	31. 45	10. 28	·1321					
8. 9	31. 45	10. 55	·1317					
8. 22	31. 25	11. 52	·1313					
8. 38	32. 15	12. 24	·1317					
8. 55	32. 50	15. 48	·1312					
9. 56	32. 30	16. 0	·1314					
10. 8	33. 30	17. 22	·1313					
10. 38	31. 30	17. 39	·1316					
10. 57	31. 30	19. 6	·1311					
11. 4	32. 10	20. 14	·1300					
11. 8	31. 35	21. 39	·1297					
13. 9	33. 30	22. 8	·1293					
13. 23	35. 15	23. 59	·1309					
14. 1	35. 0							
14. 43	33. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.26								
h m	° ′ ″	h m		h m		h m		°
15. 40	20. 32. 40							
15. 48	33. 10							
15. 54	32. 15							
17. 9	31. 0							
17. 14	30. 5							
17. 25	30. 20							
17. 38	30. 5							
17. 46	29. 5							
18. 0	29. 0							
18. 10	28. 15							
18. 13	29. 0							
18. 21	28. 10							
18. 38	28. 15							
18. 42	28. 40							
	***							
19. 28	27. 20							
	***							
20. 9	27. 55							
21. 39	32. 40							
22. 9	35. 50							
22. 39	37. 30							
23. 59	42. 40							
Apr.27		Apr.27		Apr.27		Apr.27		
0. 0	20. 42. 40	0. 0	·1309	0. 0	·03315	0. 0	58 ·8	61 ·0
0. 59	43. 5	0. 27	·1323	0. 24	{ ·03330 ·03365	1. 0	59 ·1	61 ·7
2. 28	39. 35	0. 34	·1320	7. 29	·03435	3. 0	59 ·3	62 ·2
4. 7	36. 10	1. 18	·1318	9. 30	·03440	Max.	60 ·7	63 ·2
4. 55	35. 15	1. 33	·1321	10. 48:	·03410	9. 0	59 ·8	62 ·0
5. 9	34. 0	2. 0	·1317	12. 27	·03413	Min.	57 ·0	59 ·8
5. 16	34. 30	4. 8	·1316	19. 0	·03400	21. 0	58 ·7	60 ·4
5. 40	34. 25	4. 58	·1320	21. 30	·03370			
5. 46	33. 50	5. 15	·1314	23. 59	·03375			
6. 48	33. 20	5. 45	·1325					
7. 7	33. 40	6. 8:	·1322					
7. 41	32. 45	6. 21	·1325					
8. 1	33. 25	6. 56	·1323					
11. 7	32. 5	7. 16	·1328					
11. 37	30. 0	7. 41	·1325					
11. 54	29. 50	9. 12	·1322					
12. 26	31. 20	9. 56	·1325					
17. 17	30. 35	11. 12	·1321					
18. 25	29. 0	11. 45	·1326					
18. 37	30. 0	12. 24	·1320					
19. 11	30. 0	13. 20	·1326					
20. 56	30. 35	13. 33	·1321					
21. 3	31. 30	13. 52	·1323					
21. 26	32. 0	14. 51	·1318					
22. 14	36. 55	17. 26	·1323					
23. 17	38. 5	18. 13	·1323					
23. 59	39. 35	18. 44	·1317					
		19. 27	·1319					
		21. 17	·1310					
		21. 47	·1301					
		23. 37	·1302					
		23. 59	·1308					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Apr.28		Apr.28		Apr.28		Apr.28			Apr.28		Apr.28						
h m	° ′ ″	h m		h m		h m	°	°	h m	′ ″	h m		h m				
0. 0	20. 39. 35	0. 0	·1308	0. 0	·03375	1. 0	59·3	62·2	23. 59	20. 40. 30	22. 41	·1308					
0. 42	41. 0	0. 40	·1317	1. 18	·03395	3. 0	59·7	62·4			23. 27	·1293					
1. 12	40. 20	0. 55	·1312	2. 45	·03420	Max.	60·8	62·9			23. 39	·1298					
1. 46	41. 50	1. 42	·1321	3. 2	·03418	9. 0	59·8	60·8			23. 44	·1293					
2. 4	41. 0	2. 0	·1313	3. 46	·03436	Min.	57·6	59·0			23. 59	·1294					
2. 29	41. 0	2. 23	·1314	6. 6	·03465	21. 0	58·4	59·0									
2. 54	41. 25	2. 46	·1325	6. 9	·03457				Apr.29		Apr.29		Apr.29		Apr.29		
3. 27	39. 30	3. 11	·1313	6. 30	·03470				0. 0	20. 40. 30	0. 0	·1294	0. 0	·03360	1. 0	58·3	59·9
3. 44	39. 5	3. 37	·1311	12. 49	·03440				0. 39	39. 30	0. 25	·1296	2. 12	·03390	3. 0	58·3	59·9
3. 55	39. 30	3. 43	·1316	19. 28	·03410				0. 43	41. 30	0. 43	·1315	3. 10	·03410	Max.	58·9	60·2
3. 58	39. 5	3. 45	·1313	20. 29	·03385				0. 54	40. 55	0. 56	·1309	4. 26	·03438	9. 0	58·3	58·7
5. 6	38. 5	3. 55	·1324	20. 44	·03392				1. 34	42. 50	1. 17	·1308	6. 2	·03470	Min.	56·4	57·9
6. 2	35. 35		***	23. 47	·03360				1. 56	41. 0	1. 35	·1315	10. 39	·03400	22. 35	56·6	58·0
6. 6	34. 50	4. 36	·1319	23. 59	·03360				2. 14	42. 25	2. 2	·1305	17. 55	·03380			
6. 22	34. 30	4. 45	·1323						2. 25	41. 10		***	20. 26	·03350			
6. 36	34. 30	4. 48	·1319						2. 31	41. 10	2. 14	·1318	23. 59	·03320			
6. 51	35. 0	5. 11	·1325						2. 40	40. 30	2. 32	·1307					
9. 39	33. 0	5. 15	·1323						3. 9	40. 30		***					
9. 51	33. 20	6. 3	·1325						3. 27	38. 5	3. 40	·1305					
9. 57	32. 40	6. 8	·1317						3. 37	38. 5	4. 48	·1314					
10. 17	32. 10	6. 17	·1323						3. 41	37. 25	5. 18	·1311					
10. 30	32. 40	6. 52	·1324						3. 58	37. 5	5. 25	·1318					
10. 38	32. 10	7. 10	·1328						4. 43	35. 40	5. 45	·1319					
10. 47	32. 25	7. 20	·1322						5. 8	35. 0	5. 56	·1322					
11. 30	30. 50	7. 48	·1327						5. 25	33. 30	6. 17	·1315					
12. 17	32. 30	7. 53	·1325						5. 33	32. 25	6. 49	·1314					
12. 55	31. 20	8. 6	·1330						6. 25	32. 30	7. 3	·1317					
14. 38	33. 50	8. 19	·1328						7. 13	31. 55	8. 11	·1320					
15. 11	33. 10	8. 32	·1333						7. 53	33. 30	8. 18	·1316					
15. 31	33. 40	8. 54	·1329						8. 6	32. 55	8. 50	·1319					
16. 9	32. 40	9. 6	·1333						8. 13	33. 25	8. 56	·1315					
17. 25	31. 40	9. 16	·1327						8. 23	32. 50	9. 25	·1320					
17. 32	31. 10	9. 40	·1332						8. 31	33. 0	9. 42	·1315					
17. 36	31. 30	9. 48	·1327						9. 19	32. 30	10. 19	·1311					
17. 55	31. 15	10. 0	·1328						9. 31	33. 20	12. 12	·1317					
18. 14	29. 40	10. 5	·1324						9. 52	32. 30	12. 40	·1313					
18. 24	30. 30	10. 26	·1324						10. 25	32. 35	14. 26	·1319					
18. 28	29. 40	10. 35	·1329						12. 17	31. 30	14. 41	·1313					
18. 39	30. 15	11. 23	·1321						13. 51	31. 15	15. 2	·1318					
19. 8	28. 5	11. 58	·1321						14. 46	32. 0	17. 12	·1312					
19. 26	29. 25	12. 28	·1326						15. 11	31. 5	17. 37	·1317					
19. 38	28. 5	12. 38	·1321						15. 46	31. 10	18. 26	·1312					
19. 56	29. 25	12. 45	·1324						17. 9	29. 40	19. 58	·1314					
20. 1	28. 35	13. 24	·1324						17. 23	30. 30	20. 10	·1310					
20. 11	28. 35	13. 49	·1319						17. 26	30. 30	21. 24	·1300					
20. 16	29. 30	14. 0	·1322						17. 38	29. 55	22. 17	·1301					
20. 27	28. 5	14. 17	·1319						17. 55	29. 55	22. 51	·1305					
20. 46	31. 30	16. 5	·1320						18. 8	29. 25	23. 8	·1300					
20. 56	30. 35	17. 12	·1321						18. 22	30. 0	23. 26	·1304					
21. 2	30. 35	18. 24	·1316						18. 27	28. 55	23. 59	·1302					
21. 19	32. 10		***						18. 40	29. 30							
21. 39	31. 55	20. 9	·1320						20. 8	29. 20							
21. 55	32. 30	20. 26	·1314						20. 16	28. 40							
22. 39	36. 25	20. 42	·1317						20. 31	29. 35							
22. 53	38. 20	21. 15	·1303						20. 52	29. 35							
23. 18	39. 5	21. 46	·1301						21. 0	29. 40							
23. 31	38. 30	22. 2	·1304						21. 9	30. 30							
23. 43	40. 30	22. 30	·1301						21. 11	30. 0							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 29								
h m	° ′ ″	h m		h m		h m	°	°
21. 39	20. 30. 30							
21. 48	31. 25							
21. 57	30. 55							
23. 0	34. 20							
23. 59	38. 0							
Apr. 30		Apr. 30		Apr. 30		Apr. 30		
0. 0	20. 38. 0	0. 0	·1302	0. 0	·03320	1. 0	56·6	59·0
0. 46	40. 5	0. 45	·1305	1. 28	·03350	Max.	57·9	59·9
0. 57	39. 20	1. 3	·1302	1. 38	·03340	9. 0	57·0	59·0
1. 25	41. 40	1. 25	·1316	1. 45	·03350	Min.	56·4	58·9
1. 33	40. 0	1. 37	·1300	1. 54	·03345	21. 0	56·8	59·0
1. 46	39. 35	1. 55	·1297	2. 39	·03375			
1. 57	37. 30	2. 34	·1315	4. 30	·03390			
2. 45	38. 30	2. 58	·1309	5. 7	·03395			
3. 8	38. 30	3. 24	·1309	6. 54	·03390			
3. 18	37. 50		***	13. 37	·03370			
3. 37	37. 50	4. 3	·1318	14. 15	·03360			
4. 15	33. 20	4. 34	·1309	19. 25	·03360			
4. 25	34. 0	4. 48	·1319	23. 59	·03320			
4. 38	32. 50	5. 13	·1312					
5. 3	34. 50	5. 24	·1314					
5. 23	34. 50	5. 38	·1308					
5. 53	33. 35	5. 45	·1312					
6. 8	33. 35	5. 59	·1310					
6. 40	32. 55	6. 52	·1318					
7. 39	32. 50	9. 26	·1314					
13. 0	33. 0	9. 44	·1318					
13. 16	35. 5	10. 31	·1313					
13. 31	35. 5		***					
14. 0	32. 5	12. 42	·1312					
14. 16	32. 30	13. 27	·1315					
14. 46	34. 25	13. 44	·1319					
15. 28	32. 0	14. 17	·1311					
15. 44	32. 30	17. 12	·1314					
16. 18	32. 0	17. 45	·1317					
16. 40	30. 40	18. 34	·1311					
16. 56	30. 20	20. 0	·1309					
17. 11	30. 35	21. 39	·1298					
17. 23	29. 55	21. 49	·1303					
17. 41	30. 5	23. 41	·1299					
18. 26	27. 30	23. 59	·1306					
18. 41	27. 55							
19. 8	27. 15							
19. 16	28. 0							
19. 38	27. 5							
20. 28	27. 35							
20. 41	27. 0							
21. 25	30. 0							
21. 39	29. 5							
23. 29	35. 35							
23. 59	39. 25							
May 1		May 1		May 1		May 1		
0. 0	20. 39. 25	0. 0	·1306	0. 0	·03320	Min.	56·5	58·1
1. 2	40. 45	0. 22	·1310	1. 11	·03310	1. 0	56·7	58·4
1. 10	39. 35	1. 3	·1313	3. 25	{·03330 ·03350	3. 0	56·5	58·9
2. 15	39. 0	1. 23	·1312			Max.	58·2	60·3

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 1		May 1		May 1		May 1		
h m	° ′ ″	h m		h m		h m	°	°
2. 34	20. 39. 0	1. 42	·1317	5. 1	·03370	9. 0	57·5	59·6
2. 42	39. 40	1. 56	·1315	13. 0	·03376	21. 0	56·8	58·9
3. 8	39. 15	2. 8	·1317	14. 26	·03360			
3. 23	39. 10	2. 18	·1310	19. 30	·03363			
3. 30	37. 55	2. 35	·1311	21. 3	·03350			
3. 58	37. 50	2. 50	·1320	22. 57	·03335			
4. 38	34. 40	3. 8	·1313	23. 59	·03337			
4. 58	34. 30	3. 27	·1320					
6. 16	32. 5	3. 34	·1333					
6. 42	31. 30	3. 55	·1335					
6. 56	32. 5	4. 36	·1324					
7. 9	31. 40		***					
9. 4	31. 50	6. 42	·1339					
10. 5	30. 30	6. 51	·1337					
10. 31	30. 50	7. 8	·1341					
11. 57	30. 35	7. 41	·1336					
13. 13	32. 50	7. 52	·1341					
13. 38	30. 20	9. 20	·1334					
14. 1	29. 20		***					
14. 25	30. 40	12. 4	·1332					
14. 55	29. 40	12. 55	·1333					
15. 34	31. 10	13. 37	·1339					
15. 54	30. 0	13. 58	·1332					
16. 11	29. 15	14. 9	·1332					
17. 41	29. 10	14. 22	·1336					
18. 0	28. 20	14. 55	·1332					
18. 9	29. 10	15. 35;	·1338					
18. 26	27. 40	16. 21	·1332					
19. 11	26. 15	16. 41	·1334					
19. 55	25. 50	17. 51	·1330					
19. 58	28. 5	18. 8	·1332					
21. 9	30. 30	19. 47	·1326					
22. 38	36. 30	21. 27	·1317					
23. 56	40. 45	21. 45	·1318					
23. 59	41. 30	22. 2	·1314					
		22. 34	·1317					
		23. 10	·1312					
		23. 56	·1318					
		23. 59	·1321					
May 2		May 2		May 2		May 2		
0. 0	20. 41. 30	0. 0	·1321	0. 0	·03337	Min.	57·5	59·6
0. 38	42. 45	0. 31	·1328	3. 49	·03410	1. 0	57·6	59·9
1. 11	41. 30	0. 55	·1323	5. 15	·03420	3. 0	57·8	60·3
1. 39	41. 30	1. 13	·1321	18. 55	·03424	Max.	59·0	61·2
1. 56	41. 45	1. 56	·1331	20. 47	·03410	9. 0	58·3	60·5
2. 47	40. 5	2. 36	·1329	22. 24	·03387	Min.	57·6	59·7
3. 9	37. 35	2. 51	·1333	22. 54	·03390	21. 0	58·2	59·7
3. 25	37. 5	3. 35	·1325	23. 59	·03373	22. 0	58·3	60·0
3. 37	36. 0	4. 35	·1334			23. 0	58·8	60·2
3. 50	35. 25	4. 51	·1332					
5. 11	34. 10	5. 13	·1335					
5. 24	34. 40	5. 25	·1343					
6. 44	33. 35	5. 44	·1336					
7. 38	34. 5		***					
7. 52	33. 35	6. 35	·1340					
8. 23	33. 25	6. 44	·1335					
8. 28	32. 35	7. 19	·1337					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 2		May 2						
h m	° ′ ″	h m		h m		h m	°	°
8.38	20.33.25	7.43	·1341					
9.35	32.50	8.27	·1332					
9.52	33. 5	9. 4	·1338					
11.53	32. 0	10.35	·1332					
13. 9	32.50	11.41	·1334					
13.54	32. 0	11.50	·1331					
14.16	32.40	14.59	·1333					
15.38	31. 5	16.10	·1327					
15.56	31.50	18. 2	·1331					
16.28	30.25	19.21	·1329					
17.47	29.35	19.37	·1325					
18. 1	30. 0	21. 0	·1322					
18. 9	29.30	21.18	·1324					
19.43	29.30	22.47	·1314					
20. 1	30. 5	23.59	·1333					
21. 8	30. 0							
21.44	32.10							
22.39	33.55							
22.45	33.30							
22.54	34.10							
23. 4	34.50							
23.28	34.50							
23.59	37. 0							
May 3		May 3		May 3		May 3		
0. 0	20.37. 0	0. 0	·1333	0. 0	·03373	0. 0	58·8	60·9
0.40	38.30	0.19	·1330	2.40	·03450	1. 0	59·0	61·0
2.10	36.30	1.32	·1325	3.56	·03475	2. 0	59·0	61·7
2.22	37. 0	2.13	·1330	5.15	·03486	3. 0	59·4	61·9
2.30	36. 0	2.21	·1333	9.34	·03500	Max.	60·3	62·7
2.39	36.15	2.34	·1330	12. 8	·03480	9. 0	59·5	60·5
4.30	33.50	2.45	·1334	17.43	·03490	Min.	58·6	58·8
6.27	32.35	3.21	·1327	19.41	·03475	21. 0	59·5	61·0
7.26	33.30	3.30	·1330	23.37	·03446	22. 0	59·7	61·0
8. 0	33.20	3.43	·1326	23.59	·03450	23. 0	59·6	60·5
8.33	33.35	4.16	·1331					
8.53	33. 5	4.33	·1328					
9. 4	31.25	5. 9	·1334					
10.38	32. 0	5.24	·1329					
10.46	31.30	6.44	·1338					
11.55	31.55	6.52	·1335					
12. 9	31.10	7. 3	·1338					
15. 8	31.20	7.41	·1334					
18.55	27.55		***					
19. 2	28. 5	9. 6	·1337					
19.13	27.50	10.26	·1328					
20.53	29. 0	10.57	·1332					
22.41	35.10	11.25	·1329					
23.11	35.40	12. 2	·1335					
23.25	37. 0	12.12	·1332					
23.46	37. 0	12.21	·1335					
23.59	38.30	13. 0	·1329					
		13.36	·1327					
		14.52	·1327					
		15.53	·1328					
			***					
		19.51	·1319					
		21.22	·1314					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		May 3						
h m	° ′ ″	h m		h m		h m	°	°
		21.50	·1313					
		23.25	·1322					
		23.42	·1318					
		23.50	·1323					
		23.59	·1325					
May 4		May 4		May 4		May 4		
0. 0	20.38.30	0. 0	·1325	0. 0	·03450	Min.	59·5	60·5
0.11	38.30	0.57	·1332	3.15	·03490	0. 0	59·5	60·5
0.23	39. 5	1.21	·1326	6. 3	·03500	1. 0	59·5	60·9
0.39	38.30	1.55	·1329	10.49	·03495	2. 0	59·7	61·4
1.42	37.50	2.14	·1324	15.36	·03490	3. 0	59·8	61·5
1.55	38.20	2.34	·1326	18.24	·03500	Max.	60·5	62·2
2.24	37. 0	3. 6	·1321	21. 3	·03480	9. 0	59·8	60·1
2.36	37. 0	3.19	·1326	22.54	·03475	Min.	58·9	60·0
4.41	33. 0	4. 2	·1321	23.59	·03467	21. 0	59·8	61·8
5. 9	32.25	4.22	·1323			Max.	60·2	62·5
6.52	32.25	5.21	·1322					
7. 1	33. 5	5.40	·1326					
7.16	32.35	6.45	·1324					
9.57	32.30	7. 3	·1328					
10.27	31.50	8.32	·1328					
11.26	32.10	8.53	·1331					
13.24	31.35	9.46	·1327					
13.40	31. 0	10. 2	·1330					
13.55	32. 0	13.35	·1324					
14.31	30.45	13.45	·1327					
14.52	31.20	14.47	·1324					
15.11	31.25	15. 7	·1328					
15.51	30.20	16.59	·1324					
16. 8	30.30	17.21	·1326					
16.39	29.40		***					
17. 9	29.55	18.17	·1321					
17.38	29.20	20. 0	·1321					
18.13	29.30	21. 9	·1314					
18.25	28.55	21.25	·1300					
18.38	30. 5	22.22	·1294					
18.41	28.55	23.18	·1302					
18.57	29. 5	23.59	·1303					
19.25	28. 5							
19.58	28.20							
20. 8	29. 0							
20.34	28.10							
21.11	29. 0							
21.13	30.20							
21.38	30.35							
22.50	34.10							
	(†)							
23.59	38.20							
May 5		May 5		May 5		May 5		
0. 0	20.38.20	0. 0	·1303	0. 0	·03467	1. 0	60·3	63·0
0.19	39.30	0.56	·1304	2.18	·03500	3. 0	60·6	63·2
1.33	39. 0	1.21	·1306	4.19	·03540	Max.	60·6	63·2
1.42	39. 0	1.43	·1313	5.54	·03550	9. 0	60·5	60·5
3. 2	35.25	2.25	·1307	7.18	·03550	Min.	58·4	58·5
3.57	33.55	2.51	·1309	8. 1	·03540	21. 0	59·5	60·7
7. 7	33.40	3.21	·1305	9.11	·03540			
			***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

May 4. Between 22^{h}. 50^{m}. and 23^{h}. 59^{m}. Damper experiments with the Declination Magnet were in progress.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 5		May 5		May 5				
h m	° ′ ″	h m		h m		h m	°	
7.16	20. 33. 20	3.52	·1310	9.53	·03523			
8. 2	34. 0	4.36	·1308	10.41	·03490			
8.25	33. 55	5.13	·1312	13.41	·03500			
8.47	34. 5	5.43	·1309	18.40	·03500			
9.56	33. 0	6.34	·1317	21.15	·03480			
10.10	33. 50	6.52	·1315	23.30	·03460			
10.53	31. 35	7.35	·1320	23.59	·03460			
11.40	32. 25	8. 0	·1317					
11.56	32. 5	8.34	·1321					
12.35	32. 30	9.19	·1317					
12.54	33. 25	9.30	·1319					
13. 3	32. 40	10.16	·1323					
13.35	32. 20	10.36	·1315					
13.41	33. 0	10.57	·1320					
14.19	33. 0	11.21	·1314					
17.24	30. 0	11.34	·1318					
17.38	29. 5	11.39	·1316					
17.53	29. 0	13.25	·1310					
17.56	28. 30	13.36	·1313					
18.11	28. 30	13.50	·1310					
	***	14.12	·1313					
18.54	30. 30	17. 7	·1311					
18.59	30. 0	17.34	·1308					
19. 8	30. 40	17.45	·1310					
19.13	30. 30	18. 7	·1305					
19.24	31. 5	19.30	·1299					
19.56	29. 35	19.52	·1298					
20. 6	29. 50	20. 1	·1301					
20.10	29. 25	20. 6	·1297					
20.18	29. 25	20.20	·1301					
20.26	29. 5	20.33	·1300					
23.44	37. 10	21.37	·1295					
23.50	38. 25	22. 6	·1291					
23.59	38. 25	22.28	·1291					
		23. 6	·1294					
		23.39	·1291					
		23.47	·1295					
		23.59	·1293					
May 6		May 6		May 6		May 6		
0. 0	20. 38. 25	0. 0	·1293	0. 0	·03460	1. 0	60·0	62·4
0.32	38. 5		***	3. 1	·03516	3. 0	60·6	62·7
0.41	39. 10	1.14	·1304	4.10	·03550	Max.	61·4	62·9
0.54	39. 0	1.41	·1294		***	9. 0	60·4	62·4
0.58	40. 0	1.49	·1298	5.15	·03260	Min.	58·5	60·3
1. 3	39. 30	2. 4	·1293		***	22. 0	59·4	61·0
	***	2.32	·1295	5.46	·03575			
2.11	39. 0	2.58	·1304	6.15	·03563			
2.55	38. 0	3.13	·1309	6.45	·03570			
2.56	37. 55		***	7.28	·03570			
3. 2	38. 10	3.46	·1300	9.25	·03580			
3.25	37. 25	4.36	·1317	11. 7	·03560			
3.59	35. 5	5. 0	·1316	14.21	·03535			
5. 9	35. 5	5. 7	·1311	15.46	·03496			
5.37	33. 30	5.12	·1316	16.34	·03510			
5.53	33. 5	5.15	·1312	21.40	·03490			
5.58	34. 0	5.29	·1312	23.59	·03486			
6.14	33. 15	5.45	·1321					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 6		May 6						
h m	° ′ ″	h m		h m		h m	°	°
6.38	20. 31. 30	5.49	·1332					
6.47	31. 30	5.52	·1318					
7. 8	32. 30	5.58	·1318					
7.40	32. 20	6. 8	·1308					
7.53	33. 15	6.21	·1306					
8. 9	31. 45	6.38	·1309					
8.26	31. 5	6.50	·1319					
8.39	28. 15	7. 8	·1314					
8.51	28. 15	7.26	·1316					
9. 4	25. 0		***					
10. 9	32. 40	7.48	·1325					
10.23	32. 30	7.57	·1317					
10.44	33. 30	8.21	·1316					
10.57	32. 45	8.33	·1308					
11.25	32. 0	8.41	·1307					
12. 1	33. 0	8.55	·1295					
12.39	32. 0	9.10	·1302					
13.42	32. 30	9.19	·1296					
14. 0	33. 15	9.34	·1304					
14.13	34. 20	9.40	·1303					
14.41	32. 20	10. 9	·1311					
15. 2	33. 30	10.13	·1306					
15.13	31. 50	10.26	·1310					
15.26	28. 5	10.35	·1309					
15.41	26. 0	10.44	·1316					
16.38	28. 5	10.56	·1310					
17.25	28. 5	11. 9	·1312					
18.26	27. 30	11.19	·1309					
19.56	28. 40	11.49	·1313					
20. 3	28. 10	12.40	·1309					
20.24	29. 25	12.49	·1312					
20.45	29. 35	13. 4	·1309					
21.36	32. 10	13.47	·1310					
21.53	32. 0	14. 9	·1315					
22.39	33. 5	14.26	·1316					
22.41	34. 10	14.52:	·1311					
23.59	38. 20	15.17	·1317					
		15.39	·1314					
		16.12	·1307					
		17.30	·1308					
		18.30	·1306					
		18.42	·1309					
		19.37	·1306					
		20.26	·1306					
		21.12	·1298					
		21.50	·1294					
		22.34	·1293					
		22.52	·1301					
		23. 5	·1297					
		23.59	·1305					
May 7		May 7		May 7		May 7		
0. 0	20. 38. 20	0. 0	·1305	0. 0	·03486	0.30	59·5	61·3
0.33	40. 5	0.28	·1307	1.46	·03510	Max.	60·3	61·9
0.41	39. 10	0.43	·1305	3.11	·03520	9. 0	59·3	60·5
1.23	37. 30	1.25	·1299	5.57	·03535	Min.	57·4	58·8
1.30	37. 55	1.44	·1307	15.32	·03490	21. 0	58·2	59·0
1.39	37. 30	2. 6	·1300	15.53	·03475			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 7		May 7		May 7				
h m	° ′ ″	h m		h m		h m	°	°
1. 42	20. 38. 10	2. 24	·1303	17. 40	·03460			
2. 2	37. 0	2. 56	·1321	18. 16	·03450			
2. 23	36. 50	3. 9	·1322	18. 47	·03440			
2. 55	38. 5	3. 49	·1311	19. 15	·03450			
3. 38	38. 5	3. 55	·1311	20. 13	·03420			
3. 42	37. 25	4. 15	·1320	20. 30	·03410			
4. 11	37. 25	4. 27	·1315	23. 59	·03430			
4. 31	36. 50	4. 39	·1318					
4. 42	36. 10	4. 53	·1310					
4. 58	36. 10	5. 25	·1319					
5. 38	34. 0	5. 36	·1314					
6. 47	32. 35	5. 53	·1321					
7. 9	33. 20	6. 12	·1318					
7. 38	33. 5	6. 18	·1320					
8. 8	33. 35	6. 34	·1312					
9. 25	32. 50	6. 51	·1317					
9. 41	32. 30	7. 37	·1314					
10. 26	32. 40	8. 10	·1315					
10. 55	32. 15	8. 41	·1313					
11. 5	32. 35	9. 14	·1316					
13. 8	31. 50	10. 52	·1314					
13. 11	32. 35	11. 6	·1318					
13. 31	33. 5	12. 47	·1319					
13. 41	31. 40	12. 56	·1314					
14. 42	31. 30	13. 31	·1318					
15. 9	30. 30	15. 19	·1316					
15. 25	32. 40	15. 26	·1319					
15. 53	29. 30	15. 44	·1320					
16. 37	31. 40	15. 50	·1317					
16. 42	30. 30	16. 36	·1320					
17. 8	30. 50	16. 43	·1317					
17. 11	30. 0	17. 38	·1319					
17. 23	30. 50	17. 51	·1322					
17. 38	28. 40	18. 12	·1315					
17. 54	30. 40	18. 22	·1318					
	***	18. 50	·1304					
18. 4	28. 5	19. 10	·1307					
	***	19. 19	·1305					
18. 26	31. 50	19. 46	·1311					
18. 34	29. 55	20. 21	·1305					
18. 54	29. 35	20. 34	·1307					
19. 8	33. 30	20. 42	·1301					
19. 16	33. 30	20. 53	·1303					
19. 29	36. 10	21. 11	·1298					
19. 56	36. 5	21. 41	·1301					
20. 0	34. 30	22. 41	·1299					
20. 14	32. 35	23. 40	·1307					
20. 26	32. 5	23. 49	·1309					
20. 58	34. 30	23. 59	·1314					
21. 9	34. 10							
21. 27	36. 15							
21. 39	35. 40							
22. 28	36. 5							
23. 11	39. 0							
23. 59	39. 10							
May 8		May 8		May 8		May 8		
0. 0	20. 39. 10	0. 0	·1314	0. 0	·03420	Min.	58·6	60·0
1. 9	38. 30	0. 11	·1308	2. 4	·03400	1. 0	58·8	60·5

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 8		May 8		May 8		May 8		
h m	° ′ ″	h m		h m		h m	°	°
1. 44	20. 39. 35	0. 24	·1309	5. 19	·03510	3. 0	59·8	61·3
1. 55	39. 0	0. 32	·1303	7. 33	·03510	Max.	60·0	61·6
2. 21	38. 35	0. 59	·1306	12. 33	·03523	9. 0	59·0	61·2
2. 46	36. 35	1. 25	·1299	17. 8	·03520	21. 0	59·5	61·0
3. 4	35. 40	1. 41	·1308	19. 45	·03500			
3. 9	36. 30	1. 52	·1299	20. 11	·03495			
3. 16	35. 5	2. 5	·1302	23. 59	·03485			
4. 42	34. 20	2. 12	·1307					
5. 28	32. 40	2. 47	·1298					
5. 35	33. 10	4. 4	·1309					
13. 9	32. 0	4. 21	·1307					
13. 11	32. 15	4. 52	·1314					
13. 28	31. 20	5. 2	·1309					
15. 31	30. 45	5. 25	·1308					
16. 38	30. 0	5. 40	·1316					
16. 43	29. 30	6. 2	·1314					
18. 11	29. 30	9. 13	·1313					
18. 27	29. 0	9. 32	·1318					
18. 41	29. 25	11. 8	·1314					
18. 52	28. 50	11. 24	·1317					
18. 58	29. 35	13. 2	·1313					
19. 23	28. 55	13. 14	·1316					
19. 53	30. 0	13. 29	·1312					
20. 10	29. 30	14. 23	·1313					
21. 25	33. 0	17. 55	·1310					
22. 40	34. 25	20. 50	·1301					
	(†)	21. 13	·1303					
23. 59	36. 15	21. 32	·1299					
		22. 39	·1304					
		23. 59	·1310					
May 9		May 9		May 9		May 9		
	(†)	0. 0	·1310	0. 0	·03485	1. 0	59·9	62·6
0. 13	20. 36. 40	0. 16	·1314	2. 3	·03520	3. 0	61·0	63·0
0. 54	37. 10	1. 54	·1321	4. 16	·03560	Max.	61·4	63·7
	(†)	2. 37	·1317	6. 35	·03580	9. 0	60·5	62·3
2. 52	34. 50	3. 24	·1316	9. 2	·03585	21. 0	59·8	61·0
3. 25	34. 10	4. 38	·1319	10. 53	·03575	22. 0	59·0	58·7
4. 56	33. 10	5. 10	·1314	17. 36	·03570	Min.	58·7	58·7
5. 24	32. 35	5. 53	·1315	19. 34	·03560	23. 0	58·7	59·2
6. 24	33. 10	6. 30	·1318	21. 8	·03530			
6. 59	33. 5	8. 52	·1317	22. 2	·03515			
9. 22	33. 20	9. 13	·1321	23. 34	·03472			
9. 54	32. 30	9. 57	·1316	23. 59	·03460			
10. 3	31. 40	10. 12	·1321					
10. 31	32. 5	10. 48:	·1313					
10. 53	31. 10	11. 37	·1317					
11. 38	32. 40	11. 55	·1313					
11. 55	32. 10	16. 29	·1313					
15. 45	31. 50	20. 4	·1307					
18. 27	28. 35	20. 44	·1309					
19. 15	28. 35	21. 26	·1303					
19. 44	29. 50	23. 27	·1309					
20. 9	29. 55	23. 59	·1308					
21. 30	33. 15							
	(†)							
23. 59	39. 0							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Damper experiments were in progress with the Declination Magnet, on May 8^{d}. from 22^{h}. 40^{m}. to 23^{h}. 59^{m}. and also on May 9 from 0^{h}. 55^{m}. to 2^{h}. 50^{m}., and from 21^{h}. 30^{m}. to 23^{h}. 59^{m}.

Greenwich Mean Solar Time.	Western Declination.
May 10	
h m	° ′ ″
0. 0	20. 39. 0
0. 36	40. 0
1. 12	39. 20
4. 22	33. 10
5. 25	32. 15
8. 39	31. 35
9. 9	30. 30
10. 53	32. 0
12. 6	32. 30
12. 45	32. 0
13. 0	32. 20
13. 23	32. 0
13. 58	31. 40
14. 3	30. 55
14. 58	30. 0
15. 24	30. 30
15. 56	28. 5
16. 35	28. 20
16. 39	28. 0
16. 56	28. 35
17. 11	28. 20
17. 25	27. 0
19. 0	23. 25
19. 53	23. 0
19. 57	23. 20
20. 58	24. 25
21. 40	28. 30
23. 35	37. 10
23. 47	37. 10
23. 59	38. 20
May 11	
0. 0	20. 38. 20
1. 28	40. 50
2. 24	39. 20
2. 58	39. 0
3. 24	36. 50
3. 34	36. 50
3. 40	36. 20
4. 11	36. 20
4. 22	35. 0
4. 38	35. 15
4. 53	34. 40
5. 0	35. 0
5. 28	33. 55
6. 2	34. 30
6. 18	33. 30
6. 31	34. 5
6. 44	33. 40
6. 59	33. 40
7. 11	32. 55
7. 25	28. 0
7. 41	28. 0
8. 0	29. 25
8. 14	29. 0
8. 38	26. 30
9. 7	28. 10
9. 12	27. 55

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
May 10	
h m	
0. 0	·1308
0. 5	·1304
1. 45	·1312
3. 5	·1313
3. 47	·1327
4. 49:	·1326
6. 18	·1335
6. 27	·1332
6. 40	·1335
6. 57	·1331
7. 17	·1337
8. 30	·1333
9. 5	·1327
11. 48	·1331
12. 0	·1329
12. 16	·1331
12. 44	·1328
14. 51	·1331
	***
15. 19	·1333
16. 9	·1331
17. 27	·1335
19. 4	·1330
21. 1	·1320
21. 6	·1308
22. 37	·1301
23. 59	·1301
May 11	
0. 0	·1301
0. 35	·1309
2. 15	·1318
2. 41	·1320
3. 0	·1329
3. 14	·1324
3. 34	·1323
3. 38	·1325
3. 49	·1322
4. 17	·1333
4. 26	·1327
4. 38	·1325
5. 9	·1335
5. 28	·1334
5. 41	·1330
6. 14	·1331
6. 23	·1327
6. 35	·1337
6. 44	·1338
6. 53	·1333
7. 5	·1339
7. 24	·1333
7. 49	·1347
8. 8	·1339
8. 18	·1339
8. 32	·1329

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
May 10	
h m	
0. 0	·03460
4. 40	·03530
9. 10	·03516
10. 9	·03490
15. 27	·03470
16. 2	·03445
16. 40	·03440
19. 16	·03430
21. 4	·03380
22. 6	·03350
23. 24	·03342
23. 59	·03346
May 11	
0. 0	·03346
2. 30	·03385
2. 39	·03390
3. 57	·03405
4. 9	·03395
4. 54	·03400
6. 10	·03395
6. 25	·03405
7. 16	·03395
7. 42	·03405
8. 24	·03395
9. 2	·03400
10. 53	·03380
11. 2	·03370
11. 38	·03325
12. 8	·03337
13. 4	·03310
13. 12	·03290
13. 23	·03316
13. 48	·03110
14. 11:	·03190
14. 37	·03230
14. 45	·03230
14. 56	·03262
15. 58	·03295
17. 26	·03320

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 10		
h m	°	°
0. 0	58 ·7	60 ·0
1. 0	58 ·8	60 ·4
2. 0	59 ·0	60 ·4
3. 0	59 ·1	61 ·4
Max.	59 ·1	61 ·4
9. 0	58 ·8	58 ·4
Min.	56 ·6	57 ·8
21. 0	57 ·0	58 ·0
22. 0	57 ·2	58 ·4
23. 0	57 ·2	58 ·6
May 11		
0. 0	57 ·2	58 ·6
1. 0	57 ·2	58 ·8
2. 0	57 ·2	58 ·8
3. 0	57 ·2	58 ·9
Max.	58 ·0	59 ·2
9. 0	57 ·5	58 ·0
Min.	56 ·3	57 ·5
21. 0	56 ·6	57 ·9

Greenwich Mean Solar Time.	Western Declination.
May 11	
h m	° ′ ″
9. 24	20. 28. 35
9. 38	28. 15
9. 51	29. 10
10. 2	28. 0
10. 11	27. 40
10. 43	29. 35
11. 21	15. 40
11. 39	17. 10
11. 56	21. 30
12. 16	24. 30
12. 42	23. 25
13. 8	25. 30
13. 19	47. 35
13. 25	47. 30
13. 43	25. 0
13. 56	24. 40
14. 11	28. 5
14. 22	27. 25
14. 26	27. 10
14. 39	21. 15
14. 46	21. 0
15. 4	23. 10
15. 10	23. 10
15. 17	24. 30
15. 27	24. 15
15. 41	25. 35
15. 44	25. 25
15. 54	26. 0
16. 8	25. 0
16. 40	24. 5
17. 1	25. 0
17. 16	27. 30
17. 31	28. 10
17. 39	27. 35
17. 46	27. 20
17. 54	25. 30
18. 9	27. 0
18. 24	29. 40
18. 41	27. 0
18. 58	27. 0
19. 29	28. 30
19. 41	28. 20
19. 43	29. 5
19. 54	28. 10
20. 3	28. 35
20. 12	28. 25
20. 23	28. 50
20. 35	29. 30
20. 53	29. 5
21. 9	29. 20
23. 4	37. 40
23. 59	38. 55
May 12	
0. 0	20. 38. 55
1. 30	39. 30
1. 53	39. 0
2. 23	39. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
May 11	
h m	
8. 37	·1334
8. 51	·1325
9. 4	·1331
9. 42	·1321
9. 48	·1323
10. 6	·1319
10. 20	·1320
10. 32	·1325
10. 48	·1320
11. 18	·1343
11. 41	·1326
11. 57	·1327
12. 25	·1316
12. 35	·1322
12. 41	·1318
12. 56	·1321
13. 3	·1329
13. 16	·1320
13. 23	·1332
13. 28	·1327
13. 44	·1287
13. 56	·1287
14. 4	·1295
14. 15	·1293
14. 29	·1299
14. 37	·1293
14. 59	·1318
15. 20	·1313
15. 51	·1321
16. 8	·1316
16. 24	·1319
17. 0	·1308
17. 22	·1309
17. 45	·1316
17. 57	·1311
18. 21	·1321
18. 44	·1309
19. 19	·1311
19. 45	·1306
20. 10	·1294
20. 37	·1295
20. 50	·1293
21. 24	·1297
22. 33	·1293
23. 59	·1299
May 12	
0. 0	·1299
0. 55	·1302
1. 44	·1301
2. 13	·1309

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
May 11	
h m	
17. 57	·03317
19. 14	·03335
19. 57	·03320
20. 39	·03316
21. 19	·03310
23. 11	·03310
23. 59	·03325
May 12	
0. 0	·03325
5. 0	·03400
10. 59	·03360
16. 6	·03335

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
May 12		
1. 0	56 ·8	58 ·9
3. 0	57 ·0	59 ·6
Max.	58 ·3	60 ·1
9. 0	56 ·8	58 ·7

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

May 10^{d}. From 21^{h}. 25^{m}. to 23^{h}. 59^{m}. the damper of the Declination Magnet was placed experimentally in various positions, but no difficulty has been experienced in measuring the ordinates of the photographic curve during this time.

May 11^{d}. 21^{h}. 25^{m}. to 12^{d}. 0^{h}. 13^{m}. Damper experiments with the Declination Magnet were in progress, but the position of the Magnet was very slightly affected, and the ordinates have therefore been read out as usual.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 12		May 12		May 12		May 12		
h m	° ′ ″	h m		h m		h m	°	°
3. 29	20. 37. 15	2. 35	·1303	19. 1	·03320	Min.	55·8	56·9
5. 53	32. 0	3. 12	·1310	19. 30	·03316	21. 0	56·0	57·0
7. 6	31. 20	4. 6	·1308	21. 9	·03300			
8. 29	31. 0	4. 17	·1312	23. 59	·03278			
9. 19	32. 35	5. 13	·1319					
9. 32	32. 0		***					
10. 39	32. 0	7. 0	·1322					
11. 9	31. 30	8. 55	·1314					
12. 53	32. 0	9. 18	·1318					
13. 43	31. 35	9. 41	·1314					
14. 54	31. 20	10. 27	·1318					
16. 52	31. 35	11. 14	·1314					
18. 38	28. 55	14. 40	·1316					
18. 57	28. 55	15. 12	·1315					
19. 22	27. 5	17. 10:	·1318					
19. 28	27. 5	21. 57	·1291					
19. 39	27. 35	22. 21	·1291					
20. 1	27. 5	23. 8	·1300					
20. 11	27. 35	23. 47	·1303					
20. 27	26. 30	23. 59	·1297					
20. 42	28. 0							
21. 16	29. 0							
21. 26	30. 0							
22. 1	33. 30							
22. 8	35. 0							
23. 15	39. 20							
23. 49	39. 40							
	(†)							
May 13		May 13		May 13		May 13		
	(†)	0. 0	·1297	0. 0	·03278	Min.	56·7	58·3
1. 0	20. 46. 28*	0. 12	·1309	1. 2	·03295	1. 0	56·9	58·8
1. 47	48. 40	1. 48	·1325	3. 18	·03355	3. 0	57·0	59·0
2. 23	47. 0	2. 21	·1316		·03370	9. 0	57·7	59·0
2. 41	47. 20		***	5. 3	·03395	Max.	58·7	60·2
3. 11	46. 35	3. 9	·1319	5. 12	·03410	22. 0	57·7	59·0
	***	3. 49	·1303	5. 33	·03400			
3. 43	43. 30	4. 26	·1314	6. 3	·03412			
4. 26	41. 20	4. 44	·1327	6. 34	·03420			
4. 53	42. 5	4. 56	·1326	6. 43	·03415			
5. 6	43. 0	5. 17	·1342	7. 3	·03430			
5. 23	42. 25	5. 31	·1333	7. 11	·03422			
5. 30	43. 0	5. 52	·1339	7. 33	·03450			
5. 45	43. 0	6. 11	·1333	8. 21	·03440			
5. 56	42. 10	6. 12	·1338	8. 39	·03430			
6. 5	41. 20	6. 17	·1333	8. 44	·03440			
6. 11	40. 45	6. 28	·1345	10. 2	·03380			
6. 23	41. 35	6. 40	·1342	10. 19	·03390			
6. 32	40. 40	6. 53	·1346	10. 46	·03290			
6. 47	41. 0	7. 8	·1333	10. 49	·03290			
6. 56	36. 0	7. 12	·1335	10. 57	·03230			
7. 0	36. 0	7. 28	·1327	11. 18	·03310			
7. 9	33. 5	7. 53	·1319	11. 29	·03295			
7. 33	35. 20	8. 4	·1323	11. 47	·03290			
7. 43	34. 50	8. 30	·1307	12. 25	·03310			
8. 0	29. 5	8. 44	·1319	12. 31	·03310			
8. 16	30. 10	8. 55	·1315	12. 39	·03340			
8. 28	25. 0	9. 16	·1321	13. 14	·03370			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 13		May 13		May 13				
h m	° ′ ″	h m		h m		h m	°	°
8. 53	20. 28. 50	9. 33	·1320	16. 38	·03396			
9. 3	29. 55	9. 42	·1315	16. 47	·03380			
9. 12	29. 55	9. 54	·1299	17. 10	·03362			
9. 31	30. 15	10. 14	·1312	17. 23	·03370			
9. 55	28. 20	10. 38	·1349	17. 54	·03367			
10. 9	31. 30	10. 49	·1282	18. 1	·03360			
10. 14	29. 5	11. 5	·1331	18. 9	·03370			
10. 24	22. 0	11. 18	·1301	18. 23	·03360			
10. 27	25. 40	11. 25	·1297	18. 39	·03350			
10. 30	22. 10	11. 40	·1303	19. 10	·03350			
10. 40	28. 35	11. 45	·1295	19. 20	·03358			
10. 54	13. 35	11. 56	·1295	20. 15	·03330			
11. 13	29. 55	12. 9	·1305	20. 25	·03310			
11. 33	23. 45	12. 13	·1296	20. 37	·03320			
11. 44	27. 50	12. 23	·1309	20. 58	·03330			
11. 48	27. 50	12. 44	·1303	21. 43	·03350			
11. 55	28. 25	12. 49	·1309	23. 59	·03360			
11. 59	27. 30	13. 7	·1306					
12. 4	28. 10	13. 44	·1312					
12. 13	25. 30	13. 52	·1308					
12. 34	24. 30	14. 4	·1311					
13. 11	32. 0	14. 13	·1308					
13. 39	32. 30	14. 20	·1311					
14. 9	31. 20	14. 37	·1305					
14. 37	31. 10	14. 44	·1307					
15. 53	28. 50	15. 7	·1301					
16. 11	33. 5	15. 15	·1309					
16. 23	31. 30	15. 23	·1304					
16. 36	33. 0	15. 27	·1306					
16. 43	31. 50	15. 39	·1302					
16. 53	31. 40	15. 54	·1309					
	***	16. 9	·1305					
17. 9	28. 55	16. 20	·1313					
17. 23	31. 30	16. 31	·1309					
17. 27	29. 40	16. 40	·1315					
17. 52	29. 0	17. 0	·1310					
17. 54	25. 15	17. 7	·1317					
18. 3	28. 15	17. 13	·1308					
18. 9	27. 30		***					
18. 23	31. 25	17. 52	·1317					
18. 26	29. 10	17. 56	·1306					
18. 34	31. 35	18. 5	·1317					
18. 40	30. 0	18. 47	·1306					
18. 52	31. 40	19. 8	·1295					
19. 4	29. 40	19. 13	·1298					
19. 12	32. 5	19. 49	·1264					
19. 38	31. 10	20. 17	·1285					
19. 53	37. 20	20. 26	·1261					
20. 9	39. 30	20. 35	·1272					
20. 12	38. 15	20. 42	·1266					
20. 22	38. 5	20. 44	·1275					
20. 28	34. 15	20. 56	·1265					
20. 41	34. 15	21. 18	·1267					
21. 11	43. 30	21. 48	·1296					
21. 24	42. 40	22. 0	·1301					
21. 27	40. 10	22. 8	·1286					
21. 44	39. 30	22. 11	·1297					
22. 29	45. 15	22. 16	·1277					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
May 13		May 13							May 14		May 14		May 14				
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
22. 45	20. 44. 55	22. 25	·1285						7. 32	20. 38. 40	8. 43	·1327	19. 52	·03382			
22. 53	46. 40	22. 32	·1276						7. 41	39. 5	9. 14	·1313	21. 1	·03370			
23. 1	46. 0	22. 37	·1285						7. 53	34. 0	9. 17	·1317	21. 30	·03380			
23. 11	49. 0	22. 42	·1281						7. 58	33. 40	9. 34	·1297	23. 59	·0337[illegible]			
23. 23	48. 0	22. 52	·1296						8. 9	25. 40	9. 55	·1297					
23. 47	49. 50		***						8. 22	28. 40	10. 0	·1307					
23. 59	50. 0	23. 13	·1275						8. 37	20. 40	10. 11	·1309					
		23. 20	·1285						8. 41	20. 40	10. 18	·1303					
		23. 24	·1276						9. 16	30. 5	10. 25	·1309					
		23. 47	·1293						9. 25	29. 55	10. 41	·1307					
		23. 59	·1283						9. 39	25. 40	10. 49	·1294					
									9. 45	22. 0	11. 4	·1293					
May 14		May 14		May 14		May 14			9. 58	22. 20	11. 15	·1286					
0. 0	20. 50. 0	0. 0	·1282	0. 0	·03360	1. 0	57 ·8	59 ·9	10. 11	19. 20	11. 19	·1278					
0. 7	48. 35	0. 5	·1275	0. 34	·03387	Max.	58 ·5	60 ·6	10. 32	26. 50	11. 26	·1288					
0. 14	50. 0	0. 14	·1286	0. 41	·03380	9. 0	57 ·8	57 ·8	10. 41	27. 5	11. 40	·1275					
0. 22	49. 5	0. 31	·1291	1. 2	·03415	Min.	55 ·8	57 ·8	10. 54	29. 10	11. 51	·1296					
0. 34	49. 55	0. 43	·1267	1. 23	·03420	21. 0	57 ·1	59 ·4	11. 8	25. 30	12. 13	·1314					
0. 45	48. 0	1. 5	·1295	1. 37	·03457				11. 24	37. 50	12. 34	·1307					
1. 0	49. 55	1. 25	·1262	1. 40	·03450				11. 33	33. 30	12. 41	·1300					
	(†)	1. 40	·1291	1. 53	·03460				12. 24	33. 0	13. 11	·1295					
1. 4	50. 30	1. 54	·1268	2. 11	·03490				12. 27	29. 40	13. 21	·1303					
1. 28	47. 5	2. 9	·1286	2. 19	·03465				12. 30	29. 40	13. 33	·1299					
1. 40	51. 45	2. 21	·1252	2. 30	·03484				12. 53	29. 0	13. 43	·1303					
1. 46	49. 5	2. 32	·1271	2. 59	·03480				13. 8	30. 0	14. 4	·1298					
1. 55	49. 5	2. 50	·1279		***				13. 11	32. 45	14. 14	·1302					
1. 58	45. 30	3. 4	·1293	3. 33	·03480				13. 23	32. 20	14. 34	·1300					
2. 9	46. 0	3. 9	·1292		***					***	15. 1	·1304					
2. 16	49. 30	3. 17	·1299	3. 45	·03490				13. 56	36. 0	16. 41	·1300					
2. 26	44. 40		***	4. 14	.03480				14. 54	33. 5	16. 49	·1302					
2. 33	45. 0	3. 37	·1294	4. 29	·03490				15. 37	31. 30	17. 4	·1298					
2. 52	45. 0	3. 48	·1309	5. 11	·03487				15. 55	31. 40	17. 19	·1299					
2. 55	42. 40	4. 6	·1298	5. 25	·03500				16. 0	32. 30	17. 25	·1294					
3. 8	42. 40	4. 13	·1303	6. 25	·03490				16. 12	31. 20	17. 58	·1285					
3. 23	44. 50	4. 18	·1301	6. 41	·03475				17. 2	31. 45	18. 34	·1271					
3. 32	41. 40		***	7. 3	·03486				17. 17	29. 50	19. 4	·1280					
3. 40	38. 30	4. 34	·1315	7. 24	·03460				17. 30	31. 45	19. 12	·1273					
4. 1	40. 5	4. 44	·1310	7. 31	·03500				17. 38	31. 0	19. 27	·1282					
4. 8	38. 45	5. 9	·1315	7. 38	·03450				17. 52	34. 0	19. 55	·1286					
4. 10	38. 45	5. 15	·1309	7. 47	·03425					***	20. 15	·1278					
4. 13	36. 0	5. 21	·1318	7. 59	·03430				18. 14	36. 0	20. 42	·1276					
4. 25	36. 0	5. 33	·1311	8. 8	·03415				18. 24	35. 10	20. 55	·1266					
4. 31	38. 10	5. 44	·1314	8. 19	·03430				18. 31	37. 40	21. 15	·1264					
	***	6. 5	·1309	8. 37	·03410				18. 47	39. 0	21. 47	·1291					
5. 11	40. 0	6. 18	·1318	9. 23	·03380				18. 54	38. 10	22. 10	·1290					
5. 22	36. 40	6. 21	·1316	9. 54	·03342				19. 1	39. 30	22. 23	·1298					
5. 30	38. 30	6 28	·1323	10. 54	·03337				19. 9	38. 30	22. 29	·1287					
5. 38	37. 0	6. 42	·1309	11. 19	·03310				19. 14	39. 30	22. 55	·1284					
5. 41	37. 0	6. 49	·1311	11. 28	·03315				19. 22	36. 30		***					
5. 43	38. 5	7. 4	·1326	11. 41	·03270				19. 27	37. 15	23. 59	·1286					
5. 56	37. 30	7. 22	·1308	11. 48	·03280				19. 37	36. 20							
6. 7	36. 25	7. 33	·1377	11. 55	·03272				19. 59	38. 45							
6. 14	36. 25	7. 51	·1316	12. 10	·03300				20. 9	37. 30							
6. 23	35. 30	8. 1	·1326	12. 42	·03317				20. 24	37. 30							
6. 30	37. 25	8. 11	·1314	13. 46:	·03380				20. 40	38. 25							
6. 56	31. 30	8. 19	·1334	16. 1	·03400				21. 9	38. 0							
7. 11	36. 25	8. 30	·1322	16. 27	·03410				21. 11	39. 0							
7. 23	21. 10	8. 38	·1322	17. 48	·03400				21. 23	37. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 14								
h m	° ′ ″	h m		m		h m	°	°
21. 41	20. 39. 5							
22. 11	38. 5							
22. 25	40. 5							
23. 24	41. 40							
23. 35	43. 50							
23. 59	43. 25							
May 15		May 15		May 15		May 15		
0. 0	20. 43. 25	0. 0	·1286	0. 0	·03370	1. 0	58 ·0	60 ·0
0. 16	43. 55	0. 20	·1303	3. 15	·03417	3. 0	58 ·2	60 ·0
	***	0. 34	·1310	5. 11	·03465	Max.	58 ·3	60 ·2
1. 9	43. 30	0. 49	·1304	9. 36	·03420	9. 0	58 ·2	59 ·0
1. 29	43. 25	1. 15	·1306	10. 8	·03395	Min.	56 ·4	58 ·0
1. 40	43. 50		***	12. 15	·03406	21. 0	57 ·1	58 ·6
1. 52	43. 0	1. 32	·1294	12. 38	·03390			
	***	1. 43	·1298	12. 53	·03370			
2. 25	43. 50	2. 2	·1293	13. 29	·03350			
3. 24	39. 0	2. 34	·1304	13. 55	·03342			
3. 33	39. 0		***	14. 32	·03360			
3. 52	37. 5	3. 25	·1290	15. 4	·03355			
3. 59	37. 40	3. 41	·1301	15. 31	·03340			
4. 9	37. 25	3. 53	·1306	15. 40	·03350			
4. 37	39. 0	4. 0	·1301	16. 30	·03360			
4. 53	38. 25	4. 23	·1316	17. 2	·03370			
5. 0	38. 40	4. 43	·1317	18. 39	·03376			
5. 28	35. 35	5. 4	·1307	19. 13	·03370			
5. 37	35. 30	5. 10	·1311	20. 25	·03360			
	***	5. 29	·1299	21. 1	·03355			
5. 53	32. 40	5. 47	·1313	22. 54	·03320			
6. 9	32. 40	5. 54	·1307	23. 59	·03330			
6. 32	36. 0	6. 18	·1334					
6. 53	37. 30	6. 24	·1334					
7. 9	36. 50	6. 41	·1326					
7. 40	36. 50	6. 52	·1324					
8. 3	36. 0	6. 56	·1326					
8. 30	36. 25	7. 37	·1314					
8. 40	35. 50	7. 40	·1317					
8. 56	31. 35	7. 56	·1313					
9. 9	31. 20	8. 35	·1321					
9. 28	34. 30	9. 5	·1316					
9. 35	34. 5	9. 18	·1319					
9. 46	35. 35	9. 25	·1315					
10. 1	32. 30	9. 40	·1321					
10. 6	31. 55	9. 55	·1311					
10. 15	33. 5	10. 19	·1317					
10. 39	30. 30	10. 29	·1314					
11. 5	30. 0	10. 55	·1316					
11. 17	30. 45	11. 4	·1313					
11. 25	30. 45	11. 18	·1314					
11. 34	30. 5	11. 22	·1309					
11. 54	32. 0	11. 30	·1311					
11. 58	36. 30	11. 48	·1304					
12. 28	41. 30	12. 23	·1304					
12. 44	39. 30	12. 34	·1313					
13. 8	37. 40	12. 40	·1311					
13. 19	34. 20	12. 51	·1315					
13. 57	32. 0	13. 4	·1312					
14. 25	34. 20	13. 29	·1314					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 15		May 15						
h m	° ′ ″	h m				h m		
14. 39	20. 35. 45	13. 57	·1308					
14. 54	35. 45	14. 19	·1310					
14. 58	37. 20	14. 56	·1303					
15. 7	37. 30	15. 11	·1308					
15. 24	34. 30	15. 22	·1303					
15. 38	35. 40	15. 28	·1308					
16. 23	32. 40	15. 58	·1305					
16. 53	32. 30	16. 29	·1304					
17. 0	31. 20	16. 35	·1307					
17. 11	32. 15	17. 4	·1305					
17. 45	31. 5	17. 24	·1311					
	***	17. 50	·1302					
18. 40	30. 20	18. 9	·1305					
19. 9	31. 40	18. 44	·1299					
19. 42	31. 40	19. 5	·1304					
19. 45	31. 0	19. 30	·1297					
20. 9	32. 40	19. 43	·1298					
	***	19. 53	·1296					
20. 55	33. 20	20. 11	·1298					
21. 12	33. 0	20. 41	·1293					
21. 42	34. 45	21. 4	·1292					
21. 54	34. 30	21. 31	·1282					
21. 58	35. 25	21. 54	·1275					
22. 59	38. 30	22. 25	·1284					
23. 14	38. 30	22. 46	·1280					
23. 54	41. 30	23. 43	·1304					
23. 59	41. 30	23. 59	·1296					
May 16		May 16		May 16		May 16		
0. 0	20. 41. 30	0. 0	·1296	0. 0	·03330	1. 0	57 ·8	59 ·8
0. 11	41. 30	0. 25	·1302	1. 20	·03390	3. 0	56 ·8	59 ·0
0. 24	39. 25	0. 34	·1310	2. 38	·03410	9. 0	56 ·8	60 ·0
0. 42	41. 30	0. 51	·1297	2. 44	·03395	Max.	58 ·0	60 ·0
1. 9	39. 50	1. 11	·1300	2. 55	·03405	21. 0	57 ·1	58 ·9
1. 29	40. 0	1. 30	·1310	3. 24	·03395	Min.	56 ·7	58 ·4
1. 40	39. 35	1. 45	·1308	5. 49	·03430	22. 0	57 ·1	59 ·0
2. 10	41. 50	2. 0	·1313	6. 1	·03410	23. 0	57 ·3	59 ·3
2. 24	41. 20	2. 25	·1300	6. 18	·03416			
2. 40	42. 0	3. 4	·1306	10. 54	·03390			
2. 53	41. 0	3. 38	·1302	11. 23	·03370			
3. 0	42. 5	3. 47	·1300	11. 46	·03360			
3. 24	41. 40	3. 55	·1304	12. 6	·03340			
3. 31	40. 25	4. 4	·1303	12. 30	·03325			
3. 54	40. 45	4. 7	·1307	12. 48	·03312			
4. 24	39. 45	4. 13	·1305	13. 8	·03307			
4. 54	40. 35	4. 21	·1306	13. 46	·03310			
5. 2	39. 50	4. 45	·1313	15. 4	·03335			
5. 8	40. 5	4. 55	·1319	16. 3	·03310			
5. 34	35. 5	5. 10	·1314	17. 13	·03330			
5. 54	37. 0	5. 20	·1303	17. 56	·03350			
6. 1	34. 35	5. 30	·1302		***			
6. 11	34. 0	5. 46	·1310	19. 24	·03340			
6. 39	36. 5	5. 52	·1316	19. 54	·03335			
6. 53	36. 35	6. 0	·1307	20. 14	·03345			
7. 4	36. 0	6. 10	·1308	20. 32	·03340			
7. 30	36. 35	6. 20	·1317	20. 44	·03332			
7. 54	36. 50	6. 34	·1316	22. 25	·03326			
8. 9	36. 0	6. 50	·1322	23. 23	·03340			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 16		May 16		May 16				
h m	° ′ ″	h m		h m		h m	°	°
8. 39	20. 36. 20	7. 10	·1314	23. 59	·03355			
10. 11	35. 15	7. 14	·1316					
10. 27	35. 35	7. 22	·1314					
10. 34	35. 5	7. 26	·1318					
10. 42	33. 45	7. 38	·1316					
11. 1	33. 30	7. 50	·1321					
11. 32	24. 20	8. 9	·1316					
11. 54	28. 0	8. 34	·1317					
12. 10	23. 5	9. 2	·1314					
12. 23	22. 40	9. 54	·1315					
12. 29	24. 15	10. 5	·1311					
12. 37	24. 15	10. 21	·1314					
12. 42	23. 30	10. 30	·1318					
13. 0	24. 0	10. 40	·1317					
13. 32	29. 0	10. 56	·1327					
13. 48	29. 30	11. 20	·1316					
14. 6	33. 0	11. 36	·1324					
14. 27	32. 30	11. 45	·1336					
14. 32	34. 0	12. 11	·1317					
14. 54	33. 0	12. 28	·1323					
15. 11	34. 5	12. 49	·1306					
15. 27	36. 0	13. 3	·1307					
15. 37	36. 0	13. 12	·1303					
15. 42	36. 50	13. 24	·1307					
15. 46	36. 30	13. 44	·1298					
15. 57	37. 45	13. 51	·1300					
16. 8	36. 30	13. 58	·1298					
16. 12	37. 0	14. 29	·1304					
16. 23	35. 5	14. 56	·1301					
16. 29	35. 15	15. 15	·1300					
16. 37	34. 5	15. 35	·1292					
16. 45	34. 0	15. 42	·1295					
17. 11	32. 0	15. 47	·1293					
17. 40	31. 30	16. 0	·1297					
17. 56	32. 25	16. 8	·1294					
18. 13	31. 0	16. 32	·1304					
18. 33	31. 35	16. 42	·1302					
18. 36	30. 15	16. 51	·1306					
	***	17. 41	·1301					
18. 56	32. 0	17. 52	·1304					
18. 58	30. 40	18. 17	·1302					
19. 8	30. 0	18. 33	·1305					
19. 13	31. 0	18. 44	·1300					
19. 19	28. 25	19. 6	·1294					
19. 56	28. 35	19. 17	·1296					
20. 3	31. 30	19. 25	·1290					
	***	19. 40	·1286					
20. 26	31. 30	19. 47	·1287					
	***	20. 9	·1280					
20. 39	29. 40		***					
	***	22. 10	·1296					
20. 57	32. 30	22. 39	·1294					
21. 29	32. 25	22. 45	·1301					
21. 53	33. 10		(†)					
22. 6	33. 20	23. 59	·1316					
22. 38	34. 30							
22. 54	36. 0							
23. 8	36. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 16								
h m	° ′ ″	h m		h m		h m	°	°
23. 54	20. 40. 0							
23. 59	38. 40							
May 17		May 17		May 17		May 17		
0. 0	20. 38. 40	0. 0	·1316	0. 0	·03355	0. 0	57 ·7	60 ·2
0. 24	40. 0	0. 30	·1308	3. 34	·03417	1. 0	58 ·6	60 ·5
0. 31	40. 35	0. 52	·1313	4. 45	·03435	2. 0	58 ·8	60 ·6
0. 42	40. 0	1. 13	·1309	4. 56	·03422	3. 0	59 ·1	60 ·8
0. 53	41. 5	1. 23	·1314	5. 25	·03450	Max.	60 ·0	61 ·0
1. 5	40. 0	1. 40	·1310	8. 32	·03430	9. 0	58 ·8	60 ·5
1. 24	40. 10	1. 47	·1313	8. 41	·03420	Min.	58 ·0	59 ·6
1. 33	39. 50	1. 56	·1310	9. 32	·03410	21. 0	58 ·1	59 ·8
1. 44	39. 50		***	12. 3	·03406	23. 0	59 ·6	60 ·9
1. 53	39. 15	2. 36	·1320	12. 29	·03392			
2. 0	39. 15	2. 47	·1318	13. 0	·03395			
2. 6	39. 35	3. 3	·1320	13. 43:	·03370			
2. 22	38. 40	3. 12	·1315	14. 14	·03370			
2. 33	39. 25	3. 18	.1318	14. 49	·03380			
	***	3. 29	·1314	15. 21	·03380			
3. 23	38. 0	3. 35	·1317	15. 48	·03370			
	***	3. 41	·1317	16. 19	·03370			
4. 8	38. 40	4. 15	·1328	17. 0:	·03350			
4. 23	38. 0	4. 32	·1325	18. 28	·03380			
4. 39	38. 20	4. 50	·1327	19. 38	·03370			
4. 53	37. 25	4. 58	·1325	20. 37	·03385			
4. 56	37. 30	5. 6	·1310	21. 59	·03370			
5. 3	34. 40	5. 17	·1310	23. 59	·03390			
5. 14	32. 0	5. 35	·1325					
5. 27	31. 5	5. 44	·1323					
5. 34	31. 35	5. 50	·1322					
5. 44	31. 30	6. 4	·1327					
6. 9	33. 40	6. 19	·1323					
6. 18	34. 0	6. 28	·1324					
6. 36	35. 0	6. 40	·1322					
7. 10	35. 50	7. 8	·1322					
7. 41	35. 5	7. 14	·1326					
7. 57	31. 35	7. 34	·1323					
8. 13	30. 50	7. 40	·1325					
8. 29	29. 45	7. 48	·1323					
8. 37	30. 20	8. 6	·1326					
8. 53	27. 15	8. 30	·1322					
9. 0	30. 30	8. 40	·1318					
9. 26	33. 55	8. 56	·1330					
9. 39	33. 10	9. 25	·1323					
9. 54	33. 55	9. 36	·1316					
10. 3	33. 20	9. 55	·1313					
10. 15	34. 30	10. 28	·1314					
10. 38	34. 10	10. 41	·1318					
10. 44	34. 35	10. 56	·1314					
11. 0	33. 15	11. 4	·1317					
11. 33	35. 40	11. 22	·1313					
11. 43	35. 30	11. 32	·1317					
11. 54	37. 45	12. 19	·1318					
12. 24	35. 0	12. 40	·1314					
12. 39	34. 45	12. 54	·1322					
12. 55	37. 40	13. 3	·1319					
13. 8	37. 30	13. 9	·1321					
13. 11	36. 45	13. 34	·1315					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

May 16. Damper experiments with the Horizontal Force Magnet were made after 22ʰ. 45ᵐ.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
May 17		May 17						
h m	° ′ ″	h m		h m		h m	°	°
13. 25	20. 36. 35	14. 41	·1318					
13. 42	34. 5	15. 13	·1316					
14. 4	30. 30	15. 17	·1318					
14. 19	30. 30	15. 52	·1296					
14. 35	29. 30	16. 47:	·1328					
14. 54	28. 25	17. 35	·1304					
15. 13	28. 10	17. 47	·1307					
15. 24	28. 40	18. 7	·1304					
15. 41	30. 0	18. 30	·1309					
15. 54	32. 20	18. 42	·1306					
16. 12	36. 5	19. 1	·1309					
16. 23	35. 10	19. 57	·1296					
17. 0	29. 40	20. 4	·1299					
17. 26	29. 25	20. 52	·1294					
17. 41	27. 30	21. 25	·1295					
17. 44	28. 5		(†)					
17. 53	27. 30							
	***							
18. 34	31. 30							
18. 40	30. 55							
19. 2	30. 55							
19. 15	30. 10							
19. 23	29. 25							
19. 44	30. 0							
19. 58	29. 5							
20. 17	31. 55							
20. 26	31. 35							
21. 10	33. 15							
21. 36	33. 15							
22. 11	36. 5							
22. 23	37. 0							
22. 30	36. 20							
23. 3	37. 25							
23. 12	38. 30							
23. 35	38. 0							
23. 39	36. 45							
23. 52	36. 45							
23. 54	38. 10							
23. 59	38. 10							
May 18		May 18		May 18		May 18		
0. 0	20. 38. 10	0. 0	·1291	0. 0	·03390	0. 0	59 ·8	61 ·7
0. 9	38. 40	0. 56	·1296	3. 19	·03465	1. 0	59 ·8	62 ·2
0. 22	38. 0	1. 27	·1310	3. 46	·03470	2. 0	60 ·0	62 ·1
0. 38	38. 40	2. 29	·1298	5. 3	·03465	Max.	60 ·0	62 ·2
0. 40	38. 0	2. 41	·1292	9. 14	·03456	3. 0	60 ·0	61 ·6
1. 10	38. 45	2. 59	·1294	11. 2	·03430	9. 0	59 ·3	60 ·7
1. 23	39. 40	3. 22	·1306	13. 23	·03420	Min.	57 ·5	59 ·2
1. 38	40. 0	3. 30	·1308	14. 34	·03400	21. 0	57 ·8	59 ·9
2. 29	42. 0	3. 39	·1306	18. 14	·03390			
2. 40	40. 5	3. 47	·1316	20. 10	·03380			
2. 45	40. 5	3. 58	·1315	23. 59	·03400			
3. 0	38. 0	4. 10	·1319					
3. 23	37. 35	4. 40	·1308					
3. 39	36. 30	4. 46	·1308					
3. 54	37. 5	4. 57	·1316					
4. 1	36. 40	5. 5	·1312					
4. 18	37. 25	5. 15	·1316					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
May 18		May 18						
h m	° ′ ″	h m		h m		h m	°	°
4. 45	20. 36. 0	5. 40	·1310					
4. 57	36. 45	6. 15	·1319					
5. 10	35. 50	6. 37	·1315					
5. 40	35. 35	6. 49	·1318					
6. 6	36. 10	6. 57	·1314					
6. 39	35. 35	7. 42	·1309					
7. 56	34. 40	8. 0	·1312					
8. 12	35. 35	8. 10	·1310					
8. 40	35. 35	9. 2	·1312					
8. 56	34. 25	9. 42	·1310					
9. 16	33. 35	10. 11	·1316					
9. 43	34. 10	11. 16	·1310					
9. 57	34. 50	11. 34	·1312					
10. 10	34. 30	12. 11	·1307					
10. 36	35. 45	13. 26	·1312					
11. 18	34. 30	13. 32	·1309					
11. 40	35. 30	14. 47	·1308					
12. 23	33. 40	15. 27	·1306					
12. 53	33. 5	16. 52	·1309					
13. 12	34. 0	18. 21	·1304					
13. 25	32. 50	18. 41	·1306					
13. 51	34. 45	21. 38	·1301					
14. 37	31. 30	21. 49	·1298					
14. 54	31. 20	22. 15	·1300					
15. 16	30. 15	22. 30	·1297					
15. 50	29. 20	23. 45	·1299					
16. 39	30. 10		(†)					
18. 6	28. 20							
18. 53	29. 35							
20. 9	30. 20							
21. 54	33. 5							
23. 40	37. 30							
23. 59	38. 40							
May 19		May 19		May 19		May 19		
0. 0	20. 38. 40		(†)	0. 0	·03400	1. 0	60 ·6	62 ·0
0. 40	39. 35	1. 49	·1304	4. 48	·03465	3. 0	60 ·6	62 ·4
	(†)	2. 20	·1303	6. 15	·03459	Max.	60 ·8	62 ·7
1. 0	41. 52*	3. 9	·1310	9. 0	·03476	9. 0	59 ·6	62 ·7
1. 43	38. 30	3. 23	·1303	10. 53	·03480	Min.	58 ·9	60 ·8
2. 52	38. 5	4. 0	·1302	12. 11	·03481	21. 0	60 ·3	61 ·6
3. 8	38. 30	4. 28	·1305	14. 9	·03482			
3. 19	37. 0	4. 46	·1314	14. 42:	·03469			
3. 36	36. 50	5. 1	·1327	15. 24	·03467			
3. 45	37. 5	5. 25	·1323	16. 0	·03452			
4. 23	36. 25	5. 44	·1324	16. 53	·03457			
4. 45	36. 35	5. 51	·1320	17. 45	·03443			
4. 58	37. 50	6. 7	·1327	18. 4	·03450			
5. 10	37. 0	6. 13	·1319	19. 3	·03435			
5. 46	36. 25	6. 22	·1322	19. 42	·03449			
5. 54	37. 15	6. 33	·1318	21. 52	·03428			
6. 8	36. 45		***	23. 9	·03436			
6. 12	36. 45	7. 17	·1325	23. 36	·03443			
6. 23	35. 50	7. 50	·1320	23. 59	·03445			
6. 40	35. 10	8. 11	·1322					
7. 30	36. 5	8. 24	·1320					
7. 46	35. 25	8. 46	·1324					
8. 33	35. 25	9. 22	·1317					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

From May 17d. 21h. 30m. to 23h. 59m., and from May 18d. 23h. 45m. to May 19d. 1h. 49m., Damper experiments with the Horizontal Force Magnet were made.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 19		May 19						
h m	° ′ ″	h m		h m		h m	°	°
8.55	20.35.40	12.48	·1316					
9.38	34.50	13.41	·1313					
10.33	33.55	14.6	·1320					
11.54	34.20	14.55	·1314					
12.0	33.55	15.14	·1315					
12.9	34.25	16.25	·1303					
13.8	33.10	16.43	·1307					
13.44	33.35	17.41	·1301					
13.57	33.45	18.19	·1314					
14.42	31.45	18.45	·1313					
15.17	33.40	19.6	·1308					
15.27	32.30	19.28	·1309					
15.54	30.40	19.50	·1301					
16.17	31.35	20.3	·1301					
16.25	30.55	20.11	·1297					
16.41	32.30	21.43	·1291					
16.55	31.55	21.50	·1296					
17.4	32.45	22.4	·1294					
	***	23.38	·1301					
17.26	31.40	23.52	·1307					
18.23	34.50	23.59	·1306					
18.54	33.45							
18.57	32.45							
19.23	31.25							
19.29	32.45							
19.55	31.40							
20.3	32.30							
20.10	31.55							
20.24	32.5							
20.29	32.45							
20.54	32.30							
21.7	33.30							
21.36	33.40							
21.44	33.10							
21.54	34.20							
23.59	41.20							
May 20		May 20		May 20		May 20		
0.0	20.41.20	0.0	·1306	0.0	·03445	1.0	61·4	63·4
1.39	40.25	0.30	·1306	1.53	·03486	3.0	61·6	64·0
1.57	40.45	0.45	·1327	2.8	·03483	Max.	61·8	64·0
2.7	39.45	1.44	·1328	2.28	·03495	9.0	61·3	63·2
2.17	39.20	1.55	·1331	3.14	·03527 ·03548	Min.	60·1	61·1
2.59	39.50	2.11	·1320	4.16	·03569	22.7	61·3	63·0
3.29	38.5	2.19	·1321	4.53	·03577			
3.55	35.35	2.48	·1334	5.24	·03590			
4.22	36.30	3.4	·1330	8.21	·03572			
4.36	35.40	3.11	·1337	8.32	·03567			
4.58	35.5	3.15	·1329	8.56	·03575			
5.9	36.0	3.29	·1328	9.10	·03570			
5.25	36.30	3.38	·1331	9.46	·03550			
6.11	35.30	3.44	·1326	16.37	·03540			
6.40	36.20	4.14	·1336	18.25	·03543			
7.54	35.35	4.30	·1332	21.25	·03522			
8.13	33.55	4.49	·1336	22.11	·03510			
8.26	32.30	4.53	·1330	23.59	·03517			
8.42	26.30	5.10	·1334					
8.57	29.50	5.19	·1347					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 20		May 20						
h m	° ′ ″	h m		h m		h m	°	°
9.8	20.30.30	5.33	·1336					
9.24	36.50	5.57	·1336					
9.44	34.5	6.13	·1333					
9.59	34.35	6.31	·1338					
10.11	33.30	6.41	·1336					
	***	7.19	·1338					
10.55	32.45	7.52	·1334					
11.23	33.55	8.3	·1335					
11.54	33.20	8.27	·1327					
12.45	33.35	8.34	·1327					
12.58	33.0	8.46	·1341					
13.16	33.30	9.0	·1330					
13.47	33.30	9.7	·1333					
13.56	34.15	9.35	·1324					
14.9	33.20	9.53	·1333					
14.22	33.35	10.3	·1331					
16.23	32.5	10.14	·1335					
16.36	31.5	10.24	·1332					
16.41	31.5	10.39	·1334					
16.46	31.55	10.54	·1327					
16.55	31.0	11.12	·1328					
17.8	31.40	11.35	·1331					
17.11	30.35	12.6	·1328					
17.38	30.35	12.26	·1330					
18.6	30.0	12.45	·1329					
18.16	30.10	12.55	·1324					
18.33	31.35	13.8	·1327					
18.59	30.20	13.15	·1324					
19.11	31.0	13.34	·1324					
19.22	29.45	13.48	·1329					
19.36	29.30	13.52	·1326					
19.41	30.5	14.3	·1326					
20.9	29.5	14.12	·1328					
20.16	29.35	14.22	·1326					
20.36	29.15	16.39	·1325					
21.28	30.35	16.45	·1326					
22.8	32.0	18.0	·1322					
23.24	36.0	18.29	·1318					
23.59	37.35	18.53	·1320					
		19.17	·1315					
		19.41	·1319					
		19.48	·1318					
		20.17	·1321					
			***					
		21.14	·1319					
		21.36	·1321					
		21.54	·1318					
		22.40	·1322					
		22.52	·1318					
		23.59	·1326					
May 21		May 21		May 21		May 21		
0.0	20.37.35	0.0	·1326	0.0	·03517	Min.	61·5	64·0
1.26	38.25	0.39	·1328	2.19	·03570	1.0	61·6	64·2
1.53	37.50	1.42	·1327	5.9	·03610	9.0	62·6	65·2
2.4	38.5	2.8	·1332	6.0	·03610	Max.	63·0	65·6
2.44	37.0	2.44	·1332	11.38	·03646	21.0	62·7	64·7
2.54	37.35	2.56	·1338	12.3	·03643			
	***							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 21		May 21		May 21				
h m	° ′ ″	h m		h m		h m	°	°
4. 6	20. 36. 0	3. 21	·1341	13. 38	·03641			
6. 56	34. 45	3. 31	·1338	14. 9	·03634			
7. 54	35. 20	3. 40	·1342	15. 15	·03650			
8. 42	35. 0	3. 50	·1339	15. 38	·03643			
9. 3	34. 30	4. 3	·1348	17. 4	·03655			
9. 31	34. 25	4. 9	·1343	17. 38	·03640			
10. 12	33. 30	4. 33	·1344	20. 0	·03641			
11. 10	32. 50	4. 49	·1341	22. 4	·03629			
11. 14	32. 20	5. 10	·1345	23. 59	·03635			
11. 26	32. 5	5. 44	·1342					
11. 42	30. 55	7. 52	·1351					
12. 1	31. 5	8. 27	·1349					
12. 14	28. 35	8. 47	·1352					
12. 48	32. 30	9. 3	·1348					
13. 24	33. 50	9. 30	·1349					
13. 58	30. 5	9. 34	·1345					
14. 28	31. 55	9. 39	·1349					
15. 9	31. 30	9. 46	·1345					
15. 28	29. 50	10. 14	·1343					
15. 41	28. 45	10. 20	·1345					
15. 54	29. 30	11. 18	·1341					
16. 1	28. 35	11. 31	·1344					
16. 8	30. 5	11. 37	·1340					
16. 23	30. 5	11. 56	·1335					
16. 39	31. 45	12. 7	·1339					
17. 3	31. 50	12. 24	·1334					
17. 25	30. 5	12. 41	·1337					
17. 29	29. 0	12. 50	·1334					
17. 36	29. 45	13. 25	·1344					
17. 54	28. 25	14. 4	·1332					
18. 1	29. 5	14. 57	·1331					
18. 15	29. 5	15. 13	·1333					
18. 37	28. 0	16. 24	·1322					
19. 9	29. 25	17. 6	·1332					
19. 23	29. 5	18. 51	·1322					
19. 27	30. 10	19. 13	·1316					
19. 54	29. 55	19. 48	·1317					
	***	20. 48	·1310					
21. 23	33. 30	21. 24	·1313					
21. 38	35. 15	22. 18	·1309					
21. 41	34. 45	22. 38	·1318					
21. 54	36. 10	22. 42	·1312					
22. 45	36. 35	22. 59	·1319					
22. 54	37. 30	23. 1	·1317					
23. 14	37. 50	23. 44	·1323					
23. 59	39. 30	23. 59	·1322					
May 22		May 22		May 22		May 22		
0. 0	20. 39. 30	0. 0	·1322	0. 0	·03635	1. 0	64 ·0	66 ·0
0. 9	39. 40	0. 28	·1316	1. 58	·03677	3. 0	64 ·1	66 ·6
0. 15	40. 10	1. 26	·1330	2. 34	·03700	Max.	64 ·3	67 ·0
0. 24	39. 35	1. 44	·1326	3. 0	·03700	9. 0	64 ·1	66 ·6
0. 38	39. 0	1. 58	·1327	4. 15	·03728	Min.	61 ·6	63 ·6
1. 24	40. 5	2. 8	·1325	6. 19	·03734	21. 0	63 ·0	65 ·0
1. 55	39. 30	2. 25	·1328	7. 16	·03730			
2. 26	39. 30	2. 44	·1337	9. 38	·03747			
2. 42	40. 40	3. 11	·1323	12. 21	·03718			
2. 46	39. 50	3. 39	·1335	17. 33	·03698			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 22		May 22		May 22				
h m	° ′ ″	h m		h m		h m	°	°
2. 54	20. 39. 35	3. 44	·1333	18. 36	·03697			
3. 2	38. 30	4. 12	·1338	22. 8	·03677			
3. 11	38. 5	4. 42	·1332	23. 59	·03680			
3. 31	38. 30	4. 56	·1334					
3. 41	37. 25	5. 12	·1332					
4. 0	36. 50	5. 34	·1336					
4. 9	37. 25	5. 44	·1334					
4. 53	36. 50	6. 18	·1340					
5. 26	35. 25	6. 24	·1338					
6. 21	34. 35	7. 2	·1341					
6. 39	34. 40	7. 8	·1345					
7. 9	34. 40		***					
7. 39	33. 30	7. 31	·1334					
7. 57	34. 5	8. 10	·1336					
9. 9	33. 30	9. 17	·1334					
9. 44	32. 5		***					
10. 4	33. 0	10. 10	·1336					
10. 41	32. 25	10. 40	·1343					
11. 39	33. 25	10. 52	·1339					
14. 27	32. 25	11. 3	·1343					
14. 38	33. 5	11. 8	·1339					
14. 42	32. 35	12. 3	·1331					
15. 23	32. 35	12. 20	·1335					
15. 53	31. 45	18. 27	·1329					
16. 17	30. 45	18. 43	·1326					
17. 26	30. 5	19. 18	·1327					
17. 38	29. 5	19. 41	·1319					
17. 43	29. 40	20. 15	·1323					
17. 59	28. 45	20. 27	·1319					
18. 26	27. 50	20. 41	·1322					
19. 31	29. 0	21. 28	·1320					
19. 39	28. 20	22. 19	·1324					
20. 22	29. 15	22. 38	·1319					
20. 37	29. 5	23. 7	·1321					
22. 13	34. 25	23. 32	·1318					
22. 38	36. 15	23. 59	·1319					
23. 2	37. 35							
23. 59	39. 30							
May 23		May 23		May 23		May 23		
0. 0	20. 39. 30	0. 0	·1319	0. 0	·03680	1. 0	63 ·8	66 ·0
0. 16	40. 35	0. 30	·1325	2. 48	·03737	3. 0	63 ·6	66 ·0
1. 11	41. 40	1. 49	·1331	6. 34	·03779	Max.	65 ·0	66 ·5
3. 8	37. 50	2. 10	·1329	10. 54	·03763	9. 0	63 ·6	65 ·2
4. 16	34. 45	2. 28	·1333	14. 32	·03691	Min.	59 ·5	60 ·8
4. 27	35. 0	3. 10	·1334	17. 23	·03652	21. 0	60 ·2	61 ·0
4. 56	34. 25	3. 43	·1331	21. 6	·03560	22. 0	61 ·1	62 ·4
6. 11	33. 35	4. 14	·1334	23. 0	·03502	23. 0	61 ·8	63 ·0
6. 41	33. 55	4. 21	·1332	23. 59	·03570			
7. 10	33. 35	4. 27	·1335					
7. 29	34. 15	4. 38	·1336					
8. 5	33. 0	4. 45	·1332					
8. 28	33. 50	5. 41	·1340					
9. 25	34. 0	5. 52	·1337					
10. 42	34. 10	6. 16	·1344					
10. 59	33. 35	7. 36	·1347					
12. 18	34. 0	8. 6	·1344					
12. 39	33. 10	8. 30	·1347					

For the Horizontal and **Vertical Forces**, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 23		May 23						
h m	° ′ ″	h m		h m		h m	°	°
12. 51	20. 33. 20	9. 20	·1344					
12. 57	34. 35	9. 25	·1347					
13. 9	33. 35	9. 45	·1344					
13. 39	34. 35	9. 53	·1347					
13. 46	34. 30	10. 2	·1345					
14. 11	32. 35	10. 45	·1344					
15. 54	31. 40	11. 4	·1341					
16. 46	30. 0	12. 50	·1345					
17. 6	30. 40	13. 17	·1340					
17. 16	29. 45	13. 47	·1344					
17. 29	30. 10	14. 39	·1338					
17. 56	28. 40	17. 7	·1342					
18. 9	29. 30	18. 0	·1337					
18. 16	28. 35	18. 42	·1337					
18. 30	29. 5	20. 36	·1322					
18. 56	28. 35	21. 44	·1318					
19. 29	29. 30	21. 51	·1320					
19. 39	29. 0	22. 4	·1319					
20. 29	31. 30	22. 46	·1326					
20. 38	31. 5	23. 25	·1331					
21. 33	33. 35	23. 59	·1333					
21. 39	34. 35							
21. 48	35. 0							
22. 31	37. 35							
23. 32	41. 0							
23. 56	40. 30							
23. 59	41. 5							
May 24		May 24		May 24		May 24		
0. 0	20. 41. 5	0. 0	·1333	0. 0	·03570	0. 0	61·7	63·0
0. 18	41. 10	1. 23	·1343	3. 35	·03663	1. 0	61·9	63·7
1. 26	39. 55	1. 27	·1341	4. 53	·03676	3. 0	62·0	63·9
1. 37	40. 30	1. 38	·1345	9. 22	·03668	Max.	62·3	64·2
2. 22	39. 10	1. 48	·1341	10. 33	·03635	9. 0	61·1	62·0
2. 29	39. 5	2. 24	·1341	14. 30	·03590	Min.	58·5	60·2
2. 45	37. 55	2. 44	·1345	16. 0	·03580	21. 0	60·6	61·8
3. 5	37. 50	2. 56	·1340	18. 45	·03544	22. 0	61·0	62·7
3. 13	37. 10	3. 15	·1341	20. 31	·03535	23. 0	61·7	63·4
4. 30	35. 25	4. 7	·1335	22. 21	·03500			
4. 45	35. 25	4. 39	·1337	23. 59	·03528			
4. 57	35. 40	5. 9	·1348					
5. 14	34. 55		***					
5. 58	34. 55	6. 8	·1341					
6. 31	35. 15	6. 46	·1348					
7. 13	34. 25	6. 57	·1347					
8. 0	35. 0	7. 36	·1355					
9. 28	34. 0	7. 50	·1353					
9. 34	34. 20	7. 57	·1356					
9. 49	33. 35	8. 3	·1353					
10. 0	33. 35	8. 15	·1354					
10. 11	33. 15	8. 40	·1349					
11. 56	33. 5	8. 45	·1354					
12. 12	33. 45	9. 15	·1350					
12. 24	33. 5	9. 34	·1353					
12. 29	33. 35	9. 42	·1349					
12. 41	32. 30	9. 56	·1355					
12. 46	33. 5	10. 14	·1351					
13. 14	32. 30	11. 17	·1349					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 24		May 24						
h m	° ′ ″	h m		h m		h m	°	°
14. 7	20. 33. 15	12. 11	·1352					
14. 53	32. 35	12. 44	·1347					
16. 46	30. 10	17. 10	·1342					
16. 58	30. 35	17. 18	·1344					
17. 11	29. 40	17. 29	·1343					
17. 24	30. 20	18. 19	·1344					
17. 30	29. 30	20. 5	·1335					
17. 58	30. 10	20. 57	·1335					
18. 14	28. 50	21. 16	·1331					
18. 35	28. 50	21. 33	·1331					
18. 45	28. 20	22. 24	·1325					
19. 37	29. 35	23. 24	·1335					
20. 23	29. 55	23. 30	·1327					
20. 30	30. 35	23. 59	·1327					
21. 14	32. 25							
21. 52	35. 0							
22. 50	39. 55							
23. 42	42. 15							
23. 55	44. 10							
23. 59	44. 10							
May 25		May 25		May 25		May 25		
0. 0	20. 44. 10	0. 0	·1327	0. 0	·03528	0. 0	63·0	64·4
0. 12	44. 10	0. 36	·1329	1. 53	·03600	1. 0	63·6	65·2
0. 26	42. 45	1. 24	·1338	2. 38	·03614	2. 0	64·1	65·4
1. 39	40. 0	1. 34	·1335	4. 28	·03662	3. 0	64·4	65·6
1. 42	40. 30	1. 44	·1339	6. 59	·03690	Max.	64·6	65·6
1. 55	39. 55		(†)	9. 28	·03677	9. 0	61·0	61·6
2. 10	40. 20	3. 30	·1333	9. 44	·03655	Min.	58·4	58·8
2. 40	39. 5	4. 10	·1335	11. 26:	·03595	21. 0	60·8	62·5
3. 6	38. 40	4. 37	·1333	12. 33	·03586			
3. 47	36. 35	4. 53	·1336	12. 42	·03590			
4. 14	35. 35	5. 11	·1341	13. 13	·03555			
4. 56	34. 25	5. 30	·1337	15. 8	·03549			
5. 9	34. 35	6. 32	·1346	16. 0	·03532			
6. 39	33. 5	6. 45	·1346	16. 11	·03523			
7. 12	33. 25	6. 57	·1343	16. 30	·03530			
7. 30	33. 45	7. 3	·1347	17. 6	·03510			
8. 5	33. 45	7. 12	·1343	19. 42	·03517			
8. 17	34. 10	8. 5	·1344	20. 29	·03507			
8. 46	34. 5	8. 36	·1340	21. 55	·03500			
9. 9	34. 30	8. 58	·1346	23. 59	·03509			
9. 23	33. 25	9. 23	·1343					
9. 38	33. 25	9. 35	·1347					
9. 42	32. 55	9. 44	·1343					
10. 29	33. 30	11. 11	·1353					
11. 9	32. 55	11. 28	·1350					
11. 26	32. 15	11. 39	·1354					
11. 48	33. 5	11. 50	·1350					
12. 0	33. 5	12. 16	·1355					
12. 31	34. 30	12. 33	·1354					
12. 47	37. 35	12. 51	·1366					
12. 56	36. 30	13. 22	·1354					
13. 12	31. 0	13. 52	·1357					
13. 25	30. 15	14. 27	·1342					
13. 38	28. 10	14. 56	·1353					
13. 44	29. 35	15. 13	·1352					
13. 55	29. 0	15. 29	·1356					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

May 25. Damper experiments with the Horizontal Force Magnet were made between $1^h. 45^m.$ and $3^h. 30^m.$

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 25		May 25						
h m	° ′ ″	h m		h m		h m	°	°
13. 59	20. 29. 50	15. 42	·1352					
14. 9	29. 40	15. 45	·1353					
14. 42	31. 0	16. 12	·1337					
14. 56	30. 35	16. 43	·1344					
15. 9	28. 30	16. 58	·1344					
15. 26	29. 5	17. 17	·1349					
15. 53	28. 25	17. 24	·1344					
15. 59	30. 30	17. 32	·1348					
16. 10	30. 30	17. 36	·1346					
16. 37	35. 0	17. 56	·1354					
16. 52	33. 40	20. 19	·1325					
17. 12	32. 30	20. 29	·1319					
17. 19	33. 35		***					
17. 31	33. 20	20. 49	·1319					
17. 39	32. 25	21. 7	·1315					
18. 3	31. 25	21. 29	·1322					
18. 11	30. 20	21. 52	·1320					
18. 28	28. 35		***					
18. 41	28. 35	22. 40	·1327					
19. 6	27. 0	23. 17	·1332					
19. 15	27. 25	23. 36	·1336					
19. 26	26. 30	23. 49	·1334					
19. 37	28. 0	23. 59	·1338					
19. 42	27. 5							
19. 55	28. 0							
20. 6	28. 0							
20. 17	27. 30							
	***							
20. 53	31. 25							
21. 6	31. 55							
21. 23	34. 35							
21. 26	33. 40							
21. 39	34. 0							
21. 55	33. 25							
23. 16	38. 15							
23. 24	38. 5							
23. 27	39. 0							
23. 54	39. 20							
23. 59	39. 55							
May 26		May 26		May 26		May 26		
0. 0	20. 39. 55	0. 0	·1338	0. 0	·03509	Min.	61 ·6	63 ·5
0. 9	40. 10	0. 11	·1345	1. 0	·03521	1. 0	61 ·6	63 ·7
0. 17	41. 25	0. 26	·1351	2. 43	·03600	3. 0	61 ·8	64 ·6
1. 25	41. 0	0. 40	·1346	3. 0	·03616	9. 0	62 ·5	65 ·0
1. 52	41. 10	1. 4	·1336	3. 4	·03610	21. 0	62 ·8	64 ·8
2. 16	40. 35	1. 22	·1339	3. 43	·03664	Max.	63 ·0	65 ·2
2. 25	42. 50	1. 46	·1351	3. 54	·03635			
2. 38	42. 30	2. 13	·1350	4. 13	·03669			
2. 49	39. 20	2. 24	·1371	4. 39	·03662			
3. 1	39. 20	2. 41	·1368		***			
3. 11	37. 35	3. 2	·1341	5. 34	·03680			
3. 16	38. 20	3. 9	·1347	5. 49	·03674			
3. 24	37. 10	3. 12	·1339	6. 33	·03680			
3. 27	36. 50		***	6. 52	·03680			
3. 39	37. 5	3. 35	·1337	10. 11	·03672			
3. 54	40. 15	3. 48	·1347	12. 54	·03690			
4. 11	38. 5	4. 0	·1326	15. 29	·03682			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 26		May 26		May 26				
h m	° ′ ″	h m		h m		h		
4. 24	20. 39. 10	4. 18	·1341	18. 54	·03668			
4. 49	38. 0	4. 25	·1336	20. 53	·03686			
5. 5	38. 35	4. 40	·1333	23. 59	·03690			
5. 11	37. 15	5. 3	·1350					
5. 28	38. 0	5. 4	·1344					
6. 23	35. 35	5. 26	·1356					
6. 45	36. 30	5. 30	·1350					
7. 9	33. 10	5. 34	·1356					
7. 25	33. 10	5. 40	·1345					
7. 42	35. 25	5. 51	·1342					
8. 0	35. 15	6. 10	·1348					
8. 28	35. 40	6. 21	·1346					
8. 47	34. 50	6. 30	·1351					
8. 56	36. 0	7. 12	·1346					
9. 0	35. 25	7. 22	·1353					
9. 12	33. 5	7. 36	·1348					
9. 24	33. 30	8. 15	·1346					
9. 31	33. 0	8. 22	·1348					
9. 42	33. 25	8. 30	·1344					
9. 53	34. 35	8. 45	·1348					
10. 7	33. 35	9. 4	·1341					
10. 25	33. 35	9. 16	·1347					
10. 44	35. 20	9. 21	·1345					
11. 25	34. 55	9. 26	·1349					
11. 33	35. 35	10. 4	·1340					
11. 48	34. 40		***					
12. 3	34. 25	11. 18	·1343					
12. 14	35. 35	11. 53	·1338					
12. 28	36. 5	12. 10	·1342					
12. 37	35. 0	12. 17	·1344					
12. 40	36. 5	12. 26	·1341					
12. 45	35. 50	12. 41	·1346					
12. 58	34. 5		***					
13. 39	35. 15	14. 33	·1338					
13. 45	34. 55	14. 56	·1340					
14. 9	36. 40	15. 38	·1336					
14. 28	34. 50	16. 5	·1339					
14. 45	36. 0	16. 36	·1334					
15. 7	34. 40	17. 6	·1335					
15. 10	35. 5	17. 25	·1331					
15. 27	33. 20	18. 30	·1335					
15. 38	33. 40	19. 33	·1328					
15. 48	32. 5	20. 4	·1322					
16. 12	31. 35	20. 23	·1324					
16. 23	32. 55	20. 28	·1321					
16. 43	33. 30	20. 44	·1324					
16. 57	32. 40	21. 1	·1314					
17. 9	33. 25	21. 20	·1316					
17. 52	32. 15	21. 46	·1306					
18. 5	32. 40	22. 8	·1311					
18. 9	31. 35	22. 38	·1308					
18. 32	31. 35		***					
18. 44	30. 25	23. 23	·1323					
19. 4	31. 30	23. 59	·1322					
19. 25	31. 45							
19. 44	30. 35							
20. 1	30. 25							
20. 36	32. 35							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 26								
h m	° ′ ″	h m		h m		h m	°	°
20. 57	20. 32. 25							
21. 26	37. 40							
21. 36	36. 35							
21. 45	35. 5							
21. 58	37. 10							
22. 9	37. 25							
22. 25	41. 0							
22. 42	40. 25							
22. 56	41. 0							
23. 47	41. 30							
23. 59	41. 5							
May 27		May 27		May 27		May 27		
0. 0	20. 41. 5	0. 0	·1322	0. 0	·03690	Max.	63·0	66·0
0. 8	41. 40	0. 27	·1332	0. 44	·03717	1. 0	63·0	66·0
0.:14	41. 25	0. 48	·1337	1. 34	·03718	3. 0	61·8	62·3
1. 1	39. 40	1. 5	·1331	2. 4	·03742	9. 0	61·8	62·3
1. 12	39. 55	1. 45	·1338	3. 11	·03765	Min.	60·5	61·2
1. 44	42. 40	2. 4	·1346	4. 33	·03800	22. 0	62·2	63 9
2. 8	42: 30	2. 10	·1351	6. 55	·03812			
2. 11	42. 50	2. 14	·1347	8. 54	·03820			
2. 38	41. 30	2. 20	·1347	11. 15	·03755			
2. 55	40. 50	2. 42	·1333	11. 57	·03760			
3. 23	39. 5	3. 8	·1330	12. 23	·03757			
3. 50	37. 0	3. 22	·1346	12. 32	·03770			
3. 55	37. 15	3. 43	·1343	13. 12	·03755			
3. 59	36. 40	3. 48	·1348	14. 16	·03772			
4. 39	36. 30	4. 0	·1344	16. 54	·03786			
4. 43	37. 5	4. 36	·1350	19. 9	·03793			
4. 53	36. 30	4. 43	·1359	20. 38	·03770			
6. 14	34. 30	4. 51	·1355	21. 34	·03746			
6. 52	34. 40	5. 11	·1353	21. 57	·03743			
7. 6	33. 55	5. 19	·1355	22. 24	·03730			
	***	5. 25	·1351	23. 59	·03758			
8. 30	34. 10	6. 12	·1351					
8. 40	33. 45	6. 48	·1360					
10. 18	32. 35	7. 11	·1356					
11. 40	33. 45	8. 12	·1355					
12. 27	32. 35	8. 42	·1351					
12. 50	37. 55	11. 34	·1347					
13. 11	33. 35	11. 51	·1354					
13. 22	34. 10	12. 25	·1350					
13. 37	33. 30	12. 38	·1356					
13. 43	33. 45	13. 4	·1354					
14. 13	32. 55	13. 20	·1348					
14. 27	32. 35	16. 20	·1352					
14. 39	33. 5	17. 10	·1349					
15. 38	31. 25	17. 52	·1351					
16. 16	31. 5	19. 30	·1342					
16. 39	30. 20	19. 53	·1343					
16. 56	31. 5	20. 15	·1340					
17. 23	31. 0	20. 21	·1342					
17. 42	31. 55	20. 30	·1339					
18. 54	30. 0	21. 6	·1338					
19. 13	30. 25	21. 41	·1326					
19. 34	29. 25	22. 3	·1330					
19. 55	30. 30	22. 39	·1332					
20. 14	30. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 27		May 27						
h m	° ′ ″	h m		h m		h m	°	°
20. 25	20. 31. 10	22. 57	·1327					
20. 28	30. 25	23. 3	·1335					
20. 55	31. 5	23. 59	·1335					
21. 3	30. 50							
21. 21	31. 15							
21. 55	33. 45							
22. 25	34. 10							
22. 29	33. 50							
23. 0	36. 0							
23. 24	38. 50							
23. 55	39. 10							
23. 59	39. 35							
May 28		May 28		May 28		May 28		
0. 0	20. 39. 35	0. 0	·1335	0. 0	·03758	1. 0	62·8	64·3
0. 39	41. 0	0. 38	·1343	5. 4	·03856	Max.	63·1	64·7
2. 6	41. 0	0. 48	·1342	9. 2	·03861	9. 0	61·2	61·5
2. 26	39. 40	1. 30	·1344	10. 31:	·03819	Min.	60·5	60·4
2. 56	38. 25	1. 43	·1342	11. 24	·03821	21. 0	62·0	63·5
3. 26	38. 50		***	11. 53	·03810			
3. 54	37. 50	2. 24	·1346	12. 24	·03828			
4. 58	35. 35	2. 50	·1347	13. 22	·03819			
5. 7	36. 10	3. 10	·1357	13. 54	·03828			
5. 11	35. 35	3. 17	·1348	15. 11	·03836			
5. 26	35. 35	3. 23	·1352	16. 45	·03843			
5. 39	35. 5	3. 37	·1348	19. 56	·03833			
5. 48	35. 5	3. 44	·1349	21. 39	·03806			
6. 18	34. 20	3. 51	·1347	23. 59	·03804			
6. 52	34. 25	4. 11	·1351					
7. 9	33. 30	4. 34	·1350					
7. 59	33. 5	5. 6	·1357					
8. 24	32. 35	5. 41	·1356					
8. 57	32. 35	6. 10	·1362					
9. 22	33. 20	6. 27	·1358					
9. 38	32. 35	6. 59	·1359					
10. 4	33. 20	7. 9	·1355					
11. 0	32. 45	9. 7	·1362					
11. 28	32. 30	9. 20	·1356					
11. 47	27. 30	10. 0	·1358					
12. 1	27. 50	10. 7	·1355					
12. 26	30. 30	10. 17	·1356					
12. 37	28. 55	10. 48	·1353					
12. 56	30. 35	10. 53	·1356					
13. 13	29. 20	11. 8	·1354					
13. 49	32. 10	11. 39	·1363					
14. 0	32. 20	11. 50	·1355					
14. 39	30. 35	12. 19	·1354					
14. 55	31. 45	12. 49	·1364					
15. 38	29. 30	13. 24	·1351					
15. 54	29. 55	14. 35	·1353					
16. 9	29. 10	14. 45	·1351					
16. 41	32. 0	15. 24	·1358					
17. 30	29. 5	16. 4	·1348					
17. 38	29. 45	16. 49	·1346					
18. 11	28. 5	17. 44	·1350					
	***		***					
19. 11	28. 45	19. 55	·1340					
	***	20. 10	·1342					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 28		May 28						
h m	° ′ ″	h m		h m		h m	°	°
19. 56	20. 28. 5	20. 19	·1337					
20. 10	29. 40	20. 49	·1323					
20. 21	34. 35		***					
22. 59	35. 5	22. 51	·1341					
23. 3	35. 35	23. 59	·1350					
23. 11	35. 0							
23. 22	36. 5							
23. 59	37. 50							
May 29		May 29		May 29		May 29		
0. 0	20. 37. 50	0. 0	·1350	0. 0	·03804	1. 0	63 ·1	64 ·4
0. 54	37. 50	0. 17	·1348	3. 10	·03900	3. 0	62 ·8	64 ·7
1. 23	38. 45	0. 55	·1343	6. 14	·03963	Max.	64 ·4	65 ·6
1. 36	37. 30	1. 31	·1349	9. 12	·03971	9. 0	64 ·0	65 ·1
1. 53	37. 30	1. 48	·1351	13. 3	·03973	Min.	61 ·7	62 ·7
2. 4	36. 55	2. 14	·1350	13. 57	·03970	21. 0	62 ·6	63 ·0
2. 9	37. 10	2. 49	·1354	17. 24	·03981			
2. 23	36. 30	3. 18	·1350	19. 53	·03975			
3. 1	36. 20	3. 48	·1352	21. 24	·03930			
3. 34	36. 30	4. 13	·1360	22. 15	·03906			
3. 52	35. 45	4. 26	·1357	23. 59	·03934			
4. 2	35. 50	4. 36	·1361					
4. 29	35. 30	4. 50	·1354					
4. 36	35. 30	5. 2	·1354					
4. 55	34. 35	5. 8	·1359					
5. 8	35. 5	5. 20	·1352					
5. 30	33. 55	5. 30	·1356					
5. 41	34. 35	5. 39	·1355					
6. 0	33. 40	5. 46	·1360					
6. 40	33. 40	5. 54	·1356					
6. 55	33. 50	6. 4	·1356					
7. 14	33. 10	6. 11	·1360					
7. 29	33. 35	6. 24	·1359					
7. 41	33. 40	6. 46	·1356					
7. 56	34. 30	7. 42	·1363					
8. 29	33. 50	7. 52	·1369					
8. 51	33. 25	8. 26	·1360					
9. 25	36. 30	9. 10	·1370					
9. 56	33. 25	9. 49	·1359					
10. 7	33. 50	11. 33	·1356					
10. 29	33. 30	11. 49	·1358					
11. 23	34. 5	12. 27	·1354					
11. 51	33. 50	13 13	·1357					
12. 19	32. 35	15. 12	·1351					
12. 26	32 35	15. 42	·1353					
12. 36	32. 5	15. 52	·1350					
13. 1	33. 55	16. 12	·1354					
13. 25	34. 20	17. 0	·1353					
13. 51	32. 5	17. 26	·1347					
14. 21	33. 0	18. 14	·1351					
14. 38	32. 15	20. 49	·1340					
15. 16	31. 50	21. 37	·1342					
15. 43	31. 35		***					
15. 55	30. 40	23. 59	·1351					
16. 23	31. 35							
17. 7	31. 10							
17. 23	30. 15							
17. 52	31. 10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 29								
h m	° ′ ″	h m		h m		h m	°	°
18. 32	20. 30. 30							
18. 39	30. 45							
18. 44	29. 50							
20. 23	30. 5							
20. 36	30. 35							
20. 41	30. 20							
21. 26	32. 40							
21. 39	34. 0							
22. 4	34. 20							
23. 5	37. 25							
23. 11	37. 0							
23. 32	38. 15							
23. 39	37. 25							
23. 59	39. 5							
May 30		May 30		May 30		May 30		
0. 0	20. 39. 5	0. 0	·1351	0. 0	·03934	1. 0	62 ·8	64 ·2
1. 28	40. 30	1. 4	·1350	3. 22	·04034	3. 0	63 ·5	65 ·0
2. 24	40. 40	1. 40	·1356	5. 22	·04062	Max.	64 ·2	65 ·8
2. 33	41. 5	1. 52	·1350	5. 45	·04057	9. 0	62 ·5	64 ·0
3. 7	39. 50	2. 15	·1354	6. 57	·04066	Min.	60 ·6	62 ·3
3. 40	39. 30	2. 20	·1353	14. 46	·04018	21. 0	62 ·8	63 ·2
3. 56	38. 45	2. 33	·1356	16. 3	·04022	22. 0	63 ·6	63 ·5
4. 16	38. 5	2. 41	·1354	18. 34	·04017	23. 0	63 ·8	63 ·5
4. 34	38. 5	2. 50	·1347	23. 59	·04029			
5. 26	37. 0	3. 4	·1344					
5. 55	36. 40	3. 41	·1350					
7. 11	34. 35	4. 12	·1344					
8. 37	35. 0		***					
9. 8	34. 25	5. 22	·1355					
9. 17	34. 40	5. 48	·1354					
10. 36	34. 5	6. 9	·1360					
10. 54	33. 50	6. 21	·1359					
11. 31	34. 5	6. 36	·1356					
12. 1	32. 40	7. 2	·1361					
12. 12	33. 30	7. 24	·1358					
12. 24	32. 30	8. 27	·1363					
12. 39	31. 55	8. 55	·1361					
13. 7	33. 5	9. 24	·1364					
13. 22	33. 10	10. 15	·1360					
13. 53	31. 40	10. 40	·1364					
14. 11	33. 5	11. 18	·1362					
14. 45	31. 5	11. 23	·1367					
15. 36	30. 5	11. 56	·1365					
15. 45	30. 35	12. 10	·1361					
16. 1	29. 35	12. 16	·1367					
16. 38	30. 5	12. 27	·1358					
16. 41	29. 0	13. 12	·1362					
17. 9	30. 5	13. 46	·1357					
17. 30	28. 40	14. 4	·1358					
17. 41	30. 10	14. 50	·1355					
17. 54	29. 45	15. 4	·1358					
17. 58	30. 35	15. 23	·1355					
18. 23	29. 0	15. 42	·1358					
18. 29	29. 55	15. 56	·1356					
18. 46	29. 10	16. 38	·1359					
18. 57	30. 10	16. 45	·1357					
19. 4	29. 35	19. 0	·1353					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 30		May 30						
h m	° ′ ″	h m		h m		h m	°	°
19.48	20.30.15	19.25	·1351					
20.25	31.10	19.48	·1348					
20.33	31.40	20.13	·1352					
20.48	31.10	21.10	·1345					
21.39	32.20	21.30	·1352					
23.11	35. 0	22. 1	·1346					
23.24	34. 5		***					
23.38	35. 5	23.32	·1345					
23.59	35.30	23.59	·1355					
May 31		May 31		May 31		May 31		
0. 0	20.35.30	0. 0	·1355	0. 0	·04029	0. 0	63·8	63·8
0.14	37. 0	0.25	·1362	1.46	·04050	1. 0	64·0	64·4
0.26	36. 5	0.34	·1357	6.25	·04119	2. 0	64·0	64·8
1.25	38.10	0.54	·1351	9. 6	·04120	3. 0	63·9	64·8
2.12	37.45	2.38	·1352	13.11	·04069	Max.	64·0	65·0
2.26	38. 5	2.40	·1358	17.23	·04061	9. 0	62·2	63·8
3.53	37.30	3.14	·1351	18.38	·04061	Min.	61·2	62·9
4.11	36.55	3.27	·1353	20.29	·04074	21. 0	62·6	63·9
4.49	36.30	3.40	·1348	21.14	·04055	22. 0	63·6	64·6
5. 1	35.35		***	22. 4	·04060	23. 0	63·9	64·8
5.58	34.30	4.28	·1352	22.24	·04048			
6.18	34.30	4.44	·1356	23.35	·04050			
6.26	34. 0	5. 3	·1355		(†)			
7.57	33.35	5.25	·1357					
8.11	33. 0	6.22	·1363					
8.26	33.30	6.34	·1368					
8.53	33.30	8. 8	·1360					
9.24	34. 0	8.51	·1360					
9.39	33.10	9. 9	·1367					
9.58	33.10	9.25	·1363					
10. 6	33.35	9.38	·1365					
10.23	33. 5	9.57	·1363					
10.29	32. 5	10. 7	·1365					
11. 6	31.40	11. 4	·1362					
11.18	30.55	11.30	·1368					
11.29	31.15	11.41	·1366					
11.53	29.30	11.46	·1368					
12. 9	30. 5	11.48	·1357					
13.54	31. 5	12. 7	·1371					
14.44	30.55	12.20	·1366					
15.53	29.55	12.43	·1364					
16.24	30.15	13. 9	·1357					
16.55	29.35	15.15	·1361					
17. 3	30. 5	16.48	·1361					
17.24	30.10	17.56	·1357					
17.40	29.50	18.45	·1352					
17.54	30. 0		***					
18. 4	29.30	21. 4	·1346					
18.13	29.30	21. 9	·1334					
18.44	31.10	22.11	·1335					
19. 8	30.50	22.40	·1341					
19.13	31.15	23. 0	·1360					
19.16	30. 0	23.13	·1340					
19.26	30.30	23.34	·1347					
19.37	30. 0	23.59	·1342					
19.42	30.40							
19.57	29.35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 31								
h m	° ′ ″	h m		h m		h m	°	°
20.26	20.30.30							
21.30	28.25							
21.58	33. 5							
22.26	33.30							
23. 3	34.55							
23.15	34.30							
23.36	36.35							
23.59	36.35							
June 1		June 1		June 1		June 1		
0. 0	20.36.35	0. 0	·1342		(†)	0. 0	63·9	66·0
0.53	34. 5	0.43	·1344	1. 0	·04142*	1. 0	64·8	66·0
1.39	34.15	1. 2	·1340	3. 0	·04283*	3. 0	65·0	66·0
1.41	36.30	1.49	·1333	3.40	·03227	Max.	65·0	66·0
1.54	34. 0	2. 0	·1338	4. 7	·03218	9. 0	62·7	63·5
2. 7	34. 0	2. 5	·1335	5.48	·03196	Min.	61·6	62·6
2.15	34.30	2.18	·1343	6.38	·03192	21. 0	61·6	62·8
2.23	33.35	2.21	·1351	9. 3	·03165			
2.43	33.15	2.47	·1344	12.42:	·03137			
2.48	32.30	2.51	·1347	17.58	·03130			
2.56	33.25	3.18	·1343	19.46	·03093			
3. 9	33.25	4.42	·1352	23.59	·03087			
3.12	32.55	5.25	·1355					
3.27	33. 5	5.42	·1361					
3.36	33.35	6.21:	·1357					
3.54	34. 0	7. 3	·1369					
4.24	34.35	8.12	·1363					
5.10	34.25	8.46	·1365					
5.24	33.35	10.52	·1360					
5.40	33.50	15. 9	·1361					
5.53	33.20	15.36	·1359					
6.42	32. 5	17.24	·1361					
7. 0	32.30	18.34	·1359					
7.16	31. 0	19.28	·1358					
9. 9	30.30	19.42	·1359					
9.22	30.50		***					
10. 9	30. 0	20.50	·1350					
10.42	30. 0	21. 1	·1353					
12.29	29.30	22. 5	·1347					
13. 0	29.45	23.34	·1357					
13.51	29.20	23.47	·1348					
14.24	29.30	23.50	·1354					
14.54	29.30	23.56	·1348					
16. 8	29. 5	23.59	·1353					
16.38	29.30							
17. 8	28. 0							
17.15	28.10							
17.37	26.30							
18. 3	27.55							
18.23	25.35							
18.43	26. 0							
18.55	25.35							
19.12	26. 5							
19.24	25.40							
19.38	25.40							
20. 0	24.35							
20.21	25.10							
20.25	24. 5							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

June 1^{d}. 3^{h}. 15^{m}. VERTICAL FORCE.—The adjustments were altered, so that the readings were diminished by 16^{div}·62, or by 0·010895 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 1								
h m	° ′ ″	h m		h m		h m	°	°
20. 36	20. 24. 45							
21. 5	25. 35							
21. 24	27. 0							
21. 53	27. 55							
22. 54	29. 25							
23. 17	30. 55							
23. 39	32. 55							
23. 43	32. 5							
23. 59	32. 40							
June 2		June 2		June 2		June 2		
0. 0	20. 32. 40	0. 0	·1353	0. 0	·03087	1. 0	62 ·1	63 ·0
0. 16	33. 45	0. 15	·1355	5. 28	·03118	3. 0	62 ·1	63 ·0
0. 26	33. 10	0. 30	·1347	15. 19	·03068	Max.	62 ·8	63 ·7
0. 38	33. 50	0. 52	·1354	17. 30	·03067	9. 0	61 ·5	62 ·9
1. 10	34. 30	1. 26	·1359	19. 31	·03058	Min.	61 ·0	61 ·7
1. 28	35. 15	1. 45	·1366	21. 1	·03018	21. 0	61 ·8	62 ·0
1. 39	35. 0	2. 19	·1362	23. 59	·03027			
1. 47	35. 45	3. 18	·1360					
1. 57	35. 5	4. 10	·1366					
2. 35	35. 45	5. 24	·1364					
5. 8	32. 50	5. 52	·1367					
5. 17	33. 10	6. 11	·1365					
5. 35	32. 45	7. 45	·1365					
6. 23	31. 50	12. 51	·1361					
6. 49	32. 5	16. 47	·1364					
7. 3	31. 50	19. 11	·1354					
8. 6	31. 50	22. 8	·1354					
8. 17	31. 10	22. 35	·1356					
9. 14	31. 50	23. 59	·1352					
10. 16	31. 35							
11. 54	31. 50							
12. 24	31. 35							
13. 0	31. 20							
13. 33	31. 25							
15. 30	30. 15							
15. 51	30. 15							
16. 11	29. 40							
16. 54	29. 25							
16. 57	28. 55							
17. 9	29. 10							
17. 15	28. 30							
17. 26	28. 30							
17. 48	27. 25							
18. 19	27. 50							
18. 33	27. 20							
18. 40	27. 20							
18. 54	27. 0							
19. 27	25. 55							
19. 52	25. 30							
20. 23	26. 30							
20. 54	26. 30							
21. 39	28. 20							
22. 12	30. 30							
22. 42	33. 5							
23. 59	36. 10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 3		June 3		June 3		June 3		
h	° ′ ″	h m		h m		h m	°	°
0. 0	20. 36. 10	0. 0	·1352	0. 0	·03027	3. 0	63 ·0	65 ·1
1. 54	37. 40	1. 3	·1354	0. 50	·03041	Max.	63 ·8	65 ·7
2. 14	36. 30	2. 0	·1363	2. 3	·03017	9. 0	63 ·8	65 ·4
3. 16	35. 5	2. 12	·1358	5. 25	·03240	Min.	62 ·0	63 ·6
3. 29	34. 20	2. 35	·1359	6. 26	·03258	22. 0	63 ·2	64 ·0
4. 10	34. 35	3. 16	·1365	15. 0	·03205			
4. 31	33. 40	3. 36	·1360	18. 32	·03183			
4. 58	33. 25	4. 17	·1370	20. 1	·03185			
5. 11	33. 0	4. 51	·1363	21. 29	·03158			
5. 31	33. 0	5. 19	·1364	23. 59	·03159			
5. 50	32. 25	5. 40	·1368					
6. 49	32. 0	6. 49	·1365					
7. 11	32. 40	7. 44	·1370					
7. 46	32. 15	7. 56	·1366					
8. 0	32. 30	8. 4	·1368					
8. 51	32. 25	8. 17	·1366					
9. 17	31. 40	8. 45	·1369					
9. 42	32. 25	9. 15	·1364					
10. 9	32. 30	9. 48	·1369					
10. 38	31. 30	10. 32	·1366					
10. 56	31. 55	10. 59	·1368					
11. 43	32. 5	11. 45	·1362					
12. 4	31. 0	13. 7	·1360					
12. 24	31. 10	13. 23	·1363					
13. 8	30. 25	16. 27	·1362					
13. 14	31. 25	17. 49	·1351					
13. 55	30. 30	18. 18	·1355					
15. 9	30. 10	19. 33	·1346					
15. 39	29. 20	20. 30	·1346					
16. 6	30. 5	21. 26	·1342					
16. 18	29. 50	22. 44	·1348					
16. 33	29. 45	23. 48	·1356					
16. 42	28. 35	23. 59	·1355					
16. 59	28. 0							
17. 24	27. 20							
17. 39	27. 50							
17. 56	29. 5							
18. 16	28. 40							
18. 44	27. 30							
19. 23	27. 30							
19. 31	26. 40							
19. 40	27. 25							
20. 31	28. 45							
20. 47	28. 35							
21. 14	29. 5							
22. 56	34. 0							
23. 30	37. 25							
23. 59	38. 55							
June 4		June 4		June 4		June 4		
0. 0	20. 38. 55	0. 0	·1353	0. 0	·03159	1. 0	63 ·6	64 ·5
0. 26	39. 45	0. 48	·1346	1. 54	·03210	Max.	63 ·9	65 ·2
0. 55	39. 10	1. 18	·1356	1. 58	·03198	9. 0	63 ·2	64 ·6
1. 24	39. 30	1. 19	·1357	2. 5	·03224	Min.	60 ·7	62 ·9
1. 51	38. 25	1. 53	·1352	2. 33	·03207	21. 0	63 ·1	64 ·0
1. 56	38. 45	1. 59	·1362	2. 53	·03212			
2. 0	38. 10	2. 1	·1352	3. 24	·03224			
2. 12	39. 35	2. 12	·1374	3. 38	·03218			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 4		June 4		June 4				
h m	° ′ ″	h m		h m		h m	°	°
2. 28	20. 38. 40	2. 40	·1354	3. 42	·03225			
2. 51	37. 50	3. 10	·1369	4. 1	·03233			
3. 1	38. 5	3. 30	·1365	5. 18	·03237			
	***	3. 40	·1355	6. 52	·03226			
3. 33	36. 0	3. 47	·1358	9. 0	·03241			
3. 41	36. 10	4. 0	·1359	12. 18	·03228			
3. 59	35. 55	4. 33	·1353	14. 8	·03217			
4. 23	34. 30	5. 34	·1364	14. 54	·03203			
4. 49	34. 30	6. 6	·1365	17. 28	·03205			
4. 59	33. 55	6. 16	·1369	23. 59	·03184			
5. 11	34. 5	6. 51	·1357					
6. 0	33. 10	7. 21	·1367					
6. 9	33. 30	7. 47	·1367					
6. 38	32. 40	8. 3	·1364					
6. 55	33. 0	8. 18	·1367					
7. 37	32. 35	8. 38	·1365					
7. 42	33. 0	9. 27	·1366					
7. 59	32. 10	10. 22	·1361					
8. 24	32. 25	11. 58	·1358					
8. 39	32. 5	12. 21	·1360					
9. 26	32. 5	14. 5	·1357					
10. 9	32. 30	14. 33	·1362					
10. 31	32. 0	16. 10	·1357					
11. 3	31. 55	16. 19	·1359					
11. 39	31. 0	17. 9	·1354					
11. 55	31. 0	18. 19	·1354					
12. 34	31. 30	19. 6	·1351					
13. 27	31. 40	20. 53	·1343					
14. 5	30. 35	20. 59	·1347					
14. 31	31. 30	21. 47	·1345					
15. 3	29. 30	22. 27	·1336					
15. 39	30. 5	23. 59	·1345					
15. 57	29. 40							
16. 42	29. 15							
17. 6	27. 35							
17. 29	27. 45							
17. 46	27. 0							
17. 58	26. 30							
18. 39	27. 10							
19. 9	27. 0							
19. 13	26. 35							
20. 11	26. 55							
20. 23	26. 5							
20. 43	27. 10							
20. 54	26. 30							
21. 0	27. 45							
21. 7	27. 0							
21. 30	28. 55							
21. 41	29. 0							
22. 9	31. 5							
22. 14	30. 40							
22. 23	31. 10							
22. 29	31. 35							
23. 59	36. 25							
June 5		June 5		June 5		June 5		
0. 0	20. 36. 25	0. 0	·1345	0. 0	·03184	1. 0	64·1	65·3
1. 46	38. 35	0. 55	·1352	4. 19	·03288	3. 0	64·1	66·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 5		June 5		June 5		June 5		
h m	° ′ ″	h m		h m		h m	°	°
2. 1	20. 38. 30	1. 53	·1358	4. 33	·03277	Max.	64·2	66·2
2. 24	38. 45	2. 8	·1356	5. 45	·03283	9. 0	64·1	65·6
2. 34	38. 0	2. 19	·1361	5. 56	·03292	Min.	63·6	64·8
2. 51	38. 0	2. 47	·1358	6. 46	·03279	21. 0	64·2	65·8
3. 25	36. 30	2. 57	·1361	8. 14	·03284			
3. 41	36. 30	3. 20	·1348	8. 39	·03280			
4. 9	34. 40	3. 36	·1348	12. 1	·03287			
4. 29	33. 35	4. 0	·1361	12. 11	·03278			
4. 40	33. 45	4. 15	·1363	12. 23	·03283			
4. 52	33. 0	4. 26	·1357	13. 9	·03261			
5. 4	33. 25	4. 42	·1362	13. 25	·03263			
5. 54	32. 30	4. 55	·1355	14. 4	·03242			
6. 9	32. 50	5. 18	·1362	14. 53	·03257			
6. 27	32. 20	5. 44	·1361	15. 3	·03249			
7. 26	32. 35	5. 59	·1356	15. 29	·03263			
7. 41	32. 20	6. 19	·1368	15. 39	·03257			
8. 9	32. 5	7. 3	·1358	16. 11	·03270			
8. 31	32. 40	7. 28	·1371	17. 3	·03223			
8. 40	32. 5	7. 56	·1364	23. 24	·03284			
8. 54	32. 15	8. 5	·1365	23. 59	·03300			
9. 9	31. 5	8. 11	·1364					
9. 40	33. 10	8. 29	·1370					
9. 46	33. 0	8. 43	·1361					
9. 58	33. 30	8. 50	·1364					
10. 13	33. 30	9. 3	·1362					
10. 31	32. 40	9. 36	·1364					
11. 0	32. 40	9. 45	·1368					
11. 12	32. 25	9. 54	·1364					
11. 25	33. 5	10. 13	·1366					
12. 0	33. 5	10. 34	·1363					
12. 9	32. 25	10. 47	·1366					
12. 42	34. 20	11. 0	·1364					
12. 45	32. 0	11. 51	·1368					
13. 14	30. 20	12. 0	·1364					
13. 35	33. 0	12. 17	·1365					
13. 42	32. 5	12. 22	·1359					
13. 53	31. 45	12. 51	·1369					
14. 9	29. 55	13. 6	·1366					
14. 32	29. 10	13. 18	·1353					
14. 53	35. 55	13. 47	·1365					
15. 8	28. 55	14. 5	·1363					
15. 24	31. 40	14. 28	·1353					
15. 39	32. 40	14. 44	·1352					
15. 44	30. 30	14. 59	·1354					
16. 7	30. 55	15. 21	·1345					
16. 39	42. 0	15. 40	·1348					
16. 45	42. 0	15. 48	·1346					
17. 11	35. 35	16. 28	·1348					
17. 31	33. 45	16. 59	·1366					
17. 40	34. 10	17. 4	·1364					
18. 6	33. 10	17. 13	·1366					
18. 34	33. 30	17. 25	·1362					
18. 40	32. 45	17. 40	·1366					
18. 56	32. 30	18. 12	·1354					
19. 47	29. 10	18. 47	·1345					
20. 12	29. 30	19. 34	·1346					
20. 31	28. 0	20. 32	·1335					
21. 8	29. 30	21. 27	·1340					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 5		June 5						
h m	° ′ ″	h m		h m		h m	°	°
21. 16	20. 29. 30	22. 6	·1337					
22. 14	33. 20	22. 12	·1339					
22. 29	33. 30	22. 32	·1335					
23. 15	36. 40	23. 15	·1342					
23. 39	36. 40	23. 26	·1335					
23. 56	38. 0	23. 30	·1339					
23. 59	38. 5	23. 40	·1337					
		23. 59	·1340					
June 6		June 6		June 6		June 6		
0. 0	20. 38. 5	0. 0	·1340	0. 0	·03300	1. 0	65·3	66·8
0. 56	38. 30	0. 59	·1349	1. 44	·03337	3. 0	65·3	67·0
1. 39	39. 25	1. 44	·1353	2. 12	·03331	Max.	65·3	67·0
2. 0	40. 10	1. 55	·1358	3. 2	·03369	9. 0	65·1	66·9
2. 14	38. 35	2. 15	·1358	3. 18	·03392	Min.	63·7	64·3
2. 43	38. 35	2. 24	·1336	3. 42	·03383	21. 0	64·8	66·0
3. 12	37. 55	2. 50	·1354	5. 0	·03420	22. 0	64·5	65·8
3. 27	39. 55	3. 8	·1353	8. 31	·03416	23. 0	64·5	65·9
3. 53	36. 0	3. 26	·1356	11. 55	·03403			
4. 1	36. 25	3. 45	·1380	12. 26	·03370			
4. 29	35. 10	4. 6	·1336	15. 23	·03382			
4. 41	36. 0	4. 19	·1327	15. 44	·03375			
4. 53	35. 30	4. 52	·1339	16. 28	·03376			
5. 7	36. 35	5. 9	·1336	16. 48	·03366			
5. 12	36. 5	5. 19	·1351	17. 36	·03378			
5. 31	37. 0	5. 25	·1343	18. 24	·03361			
5. 46	35. 35	5. 30	·1350	23. 59	·03363			
6. 13	35. 5	5. 43	·1355					
6. 44	33. 30	5. 58	·1352					
7. 8	33. 30	6. 25	·1358					
7. 19	32. 55	6. 40	·1355					
7. 42	32. 45	6. 50	·1363					
7. 59	31. 10	7. 9	·1363					
8. 9	30. 5	7. 27	·1351					
8. 34	33. 5	7. 56	·1353					
8. 54	33. 5	8. 4	·1352					
9. 9	30. 50	8. 18	·1362					
9. 30	32. 30	8. 41	·1354					
9. 48	33. 5	8. 50	·1358					
10. 4	32. 30	9. 8	·1353					
10. 15	32. 55	9. 55	·1359					
10. 29	32. 35	10. 6	·1357					
10. 48	33. 25	10. 15	·1361					
11. 10	31. 30	10. 33	·1359					
11. 25	32. 5	10. 46	·1362					
11. 37	31. 20	11. 9	·1351					
11. 43	31. 10	11. 19	·1359					
11. 54	31. 45	11. 33	·1354					
12. 3	34. 30	11. 49	·1355					
12. 37	2[illegible]. 20	12. 10	·1378					
12. 41	28. 20	12. 35	·1364					
13. 4	29. 50	12. 44	·1365					
13. 42	28. 10	13. 25	·1353					
13. 53	26. 45	13. 46	·1357					
14. 8	26. 45	14. 58	·1350					
14. 11	27. 50	15. 33	·1355					
14. 24	27. 25	16. 26	·1349					
15. 25	30. 0	16. 41	·1350					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 6		June 6						
h m	° ′ ″	h m		h m		h m	°	°
15. 37	20. 28. 30	17. 4	·1344					
16. 7	27. 25	17. 13	·1345					
16. 32	29. 30	17. 30	·1339					
16. 51	27. 25	17. 56	·1350					
17. 11	28. 30	18. 14	·1350					
17. 16	29. 50	18. 35	·1342					
17. 25	29. 50	19. 31	·1344					
17. 40	32. 30	20. 39	·1339					
17. 46	32. 5	22. 45	·1340					
18. 10	31. 10	23. 15	·1342					
18. 24	30. 25	23. 59	·1342					
18. 28	29. 15							
19. 14	28. 30							
19. 27	28. 55							
19. 37	28. 30							
19. 56	28. 55							
20. 9	29. 40							
20. 51	30. 20							
20. 56	30. 50							
21. 12	30. 50							
21. 26	32. 5							
21. 31	31. 45							
21. 39	32. 5							
21. 57	32. 30							
22. 25	33. 50							
22. 38	33. 50							
23. 39	35. 20							
23. 59	36. 0							
June 7		June 7		June 7		June 7		
0. 0	20. 36. 0	0. 0	·1342	0. 0	·03363	0. 0	64·6	66·0
0. 46	36. 30	0. 18	·1341	4. 24	·03413	1. 0	64·8	66·0
1. 28	36. 25	1. 12	·1344	8. 56	·03382	2. 0	64·7	66·0
1. 56	36. 50	1. 29	·1342	19. 9	·03267	3. 0	64·7	66·0
2. 10	36. 5	2. 10	·1350	21. 33	·03210	Max.	64·8	66·0
2. 27	36. 35	2. 25	·1353	23. 59	·03233	9. 0	63·6	64·8
2. 29	35. 15	2. 43	·1355			Min.	61·5	61·7
3. 13	33. 55	2. 50	·1353			21. 0	62·6	62·7
4. 15	32. 35	3. 34	·1355			22. 0	62·8	62·8
4. 32	32. 25	3. 45	·1352			23. 0	62·8	63·0
4. 58	31. 30	3. 57	·1356					
5. 7	31. 40	4. 18	·1355					
5. 11	31. 10	4. 39	·1360					
6. 37	31. 30	5. 0	·1354					
7. 29	31. 5	5. 11	·1357					
8. 13	30. 55	5. 20	·1356					
8. 56	31. 5	5. 38	·1360					
9. 9	30. 20	5. 47	·1359					
9. 26	30. 40	5. 52	·1363					
9. 37	30. 35	6. 15	·1362					
9. 53	31. 10	6. 25	·1359					
10. 11	30. 25	6. 34	·1363					
10. 25	30. 40	7. 4	·1359					
11. 9	29. 25	7. 19	·1362					
11. 16	29. 35	8. 49	·1360					
11. 29	29. 5	9. 8	·1355					
12. 7	29. 5	9. 27	·1359					
12. 43	31. 0	10. 3	·1356					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 7		June 7						
h m	° ′ ″	h m		h m		h m	°	°
13. 7	20. 30. 50	10. 42	·1359					
13. 42	28. 35	12. 12	·1354					
14. 33	29. 5	13. 4	·1357					
15. 17	28. 45	13. 57	·1354					
15. 26	29. 25	14. 54	·1359					
15. 34	28. 50	15. 31	·1356					
15. 42	29. 0	15. 50	·1357					
15. 54	28. 40	16. 10	·1354					
16. 4	29. 5	17. 52	·1353					
16. 39	27. 35	20. 12	·1339					
17. 13	26. 50	20. 25	·1343					
17. 24	27. 0	20. 39	·1341					
17. 34	26. 0	20. 44	·1342					
17. 44	25. 10	20. 56	·1340					
17. 56	25. 30	21. 23	·1342					
18. 7	24. 40	21. 47	·1339					
18. 16	23. 40	22. 34	·1345					
18. 28	24. 15	23. 39	·1344					
18. 38	23. 55	23. 45	·1347					
18. 53	24. 50	23. 59	·1346					
18. 58	24. 50							
19. 11	25. 10							
19. 23	24. 35							
19. 40	25. 0							
19. 56	25. 50							
20. 5	24. 40							
20. 16	24. 40							
20. 25	25. 20							
20. 31	25. 20							
20. 42	26. 35							
20. 58	26. 25							
22. 29	30. 35							
23. 11	32. 45							
23. 39	33. 10							
23. 43	33. 40							
23. 52	33. 25							
23. 59	34. 10							
June 8		June 8		June 8		June 8		
0. 0	20. 34. 10	0. 0	·1346	0. 0	·03233	Min.	62·9	63·2
1. 45	35. 55	0. 47	·1352	3. 3	·03281	0. 0	63·0	63·3
1. 58	35. 35	1. 26	·1353	5. 39	·03293	1. 0	63·8	63·8
2. 13	36. 5	2. 29	·1359	6. 11	·03289	3. 0	64·1	64·2
2. 37	35. 30	2. 57	·1357	8. 52	·03309	Max.	64·1	64·5
2. 54	36. 5	3. 17	·1360	12. 3	·03288	9. 0	63·6	64·5
3. 58	34. 25	4. 56	·1357	13. 14	·03300	Min.	62·9	63·5
4. 5	33. 55	5. 19	·1362	17. 22	·03297	21. 0	63·6	63·6
4. 15	33. 55	5. 34	·1361	18. 46	·03285			
4. 41	32. 50	5. 57	·1367	21. 8	·03262			
4. 56	32. 30	6. 26	·1363	23. 10	·03257			
6. 59	31. 55	6. 57	·1370	23. 59	·03265			
7. 35	31. 40	7. 15	·1367					
7. 43	31. 50	7. 22	·1370					
8. 43	31. 15	7. 39	·1369					
9. 11	30. 40	8. 13	·1367					
9. 39	30. 50	8. 35	·1370					
9. 55	29. 50	9. 22	·1365					
10. 12	29. 5	9. 34	·1369					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 8		June 8						
h m	° ′ ″	h m		h m		h m	°	°
10. 29	20. 29. 35	10. 3	·1366					
10. 41	30. 5	10. 7	·1368					
11. 4	29. 35	10. 30	·1366					
11. 11	28. 50	10. 56	·1372					
11. 23	28. 30	11. 6	·1371					
11. 38	29. 40	11. 20	·1378					
12. 10	27. 35	12. 6	·1364					
12. 24	27. 30	12. 39	·1361					
12. 38	27. 50	12. 52	·1365					
12. 46	27. 50	15. 13	·1362					
13. 11	28. 40	16. 27	·1366					
15. 59	27. 40	17. 48	·1356					
16. 14	27. 10	18. 40	·1354					
16. 41	25. 40	19. 11	·1342					
17. 17	25. 5	20. 48	·1352					
17. 42	24. 35	21. 11	·1347					
17. 53	23. 30	21. 33	·1351					
17. 57	23. 50	21. 59	·1344					
18. 4	23. 5	22. 37	·1349					
18. 11	23. 50	23. 9	·1349					
18. 17	23. 30	23. 50	·1357					
18. 33	24. 35	23. 59	·1356					
18. 39	24. 20							
18. 46	22. 0							
19. 9	21. 40							
19. 26	24. 55							
19. 45	25. 35							
19. 58	25. 5							
20. 6	26. 10							
21. 28	27. 30							
21. 40	28. 35							
22. 25	30. 30							
23. 40	34. 55							
23. 47	35. 5							
23. 59	35. 55							
June 9		June 9		June 9		June 9		
0. 0	20. 35. 55	0. 0	·1356	0. 0	·03265	1. 0	64·8	65·0
0. 52	36. 10	0. 12	·1354	2. 2	·03303	3. 0	64·6	66·5
1. 9	41. 5	0. 28	·1360	3. 5	·03310	Max.	65·0	66·5
1. 22	39. 0	1. 18	·1365	7. 46	·03393	9. 0	64·5	64·7
1. 31	38. 35	1. 33	·1364	9. 14	·03389	Min.	63·2	63·3
1. 38	37. 40	1. 49	·1366	10. 33	·03370	21. 0	63·7	64·0
1. 45	37. 40	2. 9.	·1365	10. 48	·03376			
2. 8	36. 35	2. 23	·1369	11. 9	·03335			
2. 14	36. 55	2. 57	·1368	11. 33	·03314			
2. 38	36. 25	3. 19	·1372	12. 4	·03337			
2. 52	36. 5	3. 42	·1367	13. 6	·03280			
3. 26	36. 20	3. 51	·1376	13. 13	·03287			
3. 33	35. 55	4. 4	·1367	13. 31	·03252			
3. 49	36. 20	4. 17	·1367	13. 42	·03275			
3. 55	35. 45	4. 22	·1364	14. 0	·03263			
4. 23	34. 35	4. 51	·1366	14. 21	·03255			
5. 39	33. 50	5. 4	·1373	14. 44	·03287			
5. 57	34. 5	5. 13	·1370	15. 27	·03275			
6. 17	32. 50	5. 36	·1373	16. 1	·03293			
6. 32	31. 30	5. 52	·1371	16. 19	·03285			
6. 41	29. 5	6. 4	·1376	16. 31	·03290			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
June 9		June 9		June 9					June 9								
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
7.10	20.27.55	6.14	·1371	16.46	·03275				19. 9	20.26.30							
7.33	28.55	6.22	·1376	17.39	·03302				19.18	25.25							
7.56	31. 5	6.41	·1368	18.32	·03290				19.32	24.30							
8.15	31.25	7. 2	·1375	19.38	·03300				19.45	26.10							
8.27	30.50	7.23	·1377	19.53	·03305				20. 9	24. 0							
8.49	31. 0	7.43	·1368	21. 1	.03290					***							
8.56	30.40	7.58	·1375	23. 9	·03292				20.24	25. 5							
9. 3	30.40	9. 7	·1369	23.26	·03278					***							
9. 9	30.20	9.40	·1373	23.53	·03293				21. 8	28. 0							
9.44	30.35	9.49	·1366	23.59	·03301				21.27	27.30							
9.56	29.35	10.12	·1370						21.37	29.25							
10. 8	29.10	10.22	·1360						21.47	30.50							
10.25	27.45	10.29	·1367						21.56	30.35							
10.36	29.50	10.38	·1366						22.55	33.50							
10.42	28.35	10.55	·1388						23.11	36. 0							
10.57	20.10	11.33	·1345						23.16	37.30							
11. 9	18.30	11.43	·1355							***							
11.32	14.20	11.53	·1359						23.56	36.25							
11.39	15.25	12.27	·1349						23.59	36.35							
11.57	22. 0	12.56	·1343														
12. 8	22.10	13.12	·1363						June 10		June 10		June 10		June 10		
12.25	21.25	13.26	·1343						0. 0	20.36.35	0. 0	·1332	0. 0	·03301	1. 0	64·6	64·7
12.31	22. 0	13.36	·1354						0. 8	38. 0	0.21	·1350	2. 2	·03341	3. 0	64·7	66·0
12.53	20.50	14. 2	·1349						0.16	38.45	0.34	·1343	2.12	·03333	Max.	64·8	67·0
13. 8	20.50	14.18	·1334						0.23	40. 0	0.41	·1354		***	9. 0	64·4	66·0
13.11	18.30	14.27	·1330						0.27	40.50	1.27	·1320	4.33	·03422	Min.	62·4	63·0
13.23	12.35	14.38	·1333						0.30	41. 0	1.40	·1330	5.10	·03437	22.30	63·1	64·0
13.40	16.15	14.43	·1332						0.38	42.50	2.15	·1349	5.26	·03419			
13.53	13. 5	15. 9	·1350						0.47	41.50	2.27	·1339	5.48	·03439			
13.59	11.15	15.33	·1336						0.56	41.50	2.31	·1339	6. 1	·03425			
14. 8	10.55	15.50	·1337						1. 3	40.20	3. 0	·1361	6.23	·03437			
14.23	15.40	16. 5	·1344						1.41	39.55	3. 8	·1360	7.30	·03437			
14.26	15.55	16.13	·1342						1.56	41.25	3.18	·1338	7.48	·03423			
14.40	18.30	16.30	·1349						2. 0	40.50	3.33	·1357	8.31	·03429			
15. 8	19.35	16.40	·1346						2. 8	41.45	3.44	·1363	10.19	·03333			
15.15	19. 5	16.45	·1348						2.13	40.15	3.47	·1370	10.31	·03337			
15.27	20. 5	17. 7	·1341						2.30	40.15	4. 0	·1366	10.50	·03350			
15.43	23. 5	17.29	·1340						2.38	41.55	4.18	·1368	11.23	·03320			
15.54	27.30	17.41	·1343						2.49	42.15	4.35	·1356	12.42	·03297			
16. 1	28. 0	17.51	·1340						3. 9	39.30	4.41	·1360	13. 3	·03260			
16. 8	27.55	18.12	·1344						3.23	40. 5	4.55	·1357	13.57	·03239			
16.12	27.20	18.28	·1342						3.26	41.10	5.29	·1377	14.25	·03249			
16.19	28. 5	18.54	·1346						3.34	40.55	5.41	·1358	14.33	·03237			
	***	19. 9	·1344						3.41	40. 0	5.59	·1379	14.54	·03239			
16.39	26.10	19.20	·1346						3.52	41. 5	6.13	·1368	15.24	·03198			
16.52	27. 0	20. 0	·1337						3.56	40. 5	6.26	·1374	15.42	·03197			
	***	20.19	·1338						4. 8	36. 0	6.33	·1381	15.53	·03192			
17. 8	24.50	20.25	·1336							***	6.47	·1374	16.18	·03168			
17.12	25. 5	20.53	·1337						4.24	34.30	6.48	·1376	16.23	·03168			
17.25	21.40	21.47	·1327						4.31	31.35	7.35	·1364	16.33	·03127			
17.37	22. 5	21.53	·1333						4.56	31.25	7.51	·1348	16.53	·03156			
17.52	25.30	22. 8	·1331						5.12	34.55	8.17	·1357	17.11	·03110			
17.57	28.15	22.19	·1340						5.28	34.20	8.30	·1356	17.27	·03125			
18. 8	28.10	22.40	·1338						5.39	34.30	8.45	·1355	17.36	·03163			
18.12	30.40	23.14	·1349						5.49	35.30	8.53	·1352	17.46	·03150			
18.26	28.35	23.38	·1334						6. 0	34. 5	9.16	·1363	19. 5	·03230			
18.41	28.35	23.49	·1333						6.10	34. 5	9.24	·1360	19.25	·03231			
18.52	26.40	23.59	·1332						6.27	32.50	9.32	·1369	20. 3	·03240			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 10		June 10		June 10				
h m	° ′ ″	h m		h m		h m	°	°
6. 38	20. 33. 25	9. 48	·1365	20. 29	·03258			
6. 42	33. 25	9. 50	·1367	21. 0	·03269			
6. 53	30. 55	9. 59	·1359	21. 25	·03303			
7. 10	29. 25	10. 14	·1365	23. 59	·03368			
7. 14	30. 35	10. 24	·1360					
7. 25	30. 30	10. 50	·1387					
7. 39	30. 30	11. 15	·1357					
7. 53	28. 10	11. 39	·1345					
8. 1	27. 40	11. 57	·1359					
8. 14	27. 25	12. 25	·1351					
8. 41	28. 30	12. 46	·1364					
8. 59	27. 30	13. 45	·1344					
9. 17	30. 35	14. 4	·1336					
9. 28	29. 10	14. 19	·1333					
9. 46	30. 55	14. 32	·1319					
9. 55	30. 55	15. 5	·1366					
10. 3	28. 25	15. 24	·1364					
10. 11	30. 5	15. 41	·1377					
10. 27	20. 20	15. 44	·1376					
10. 33	20. 20	15. 51	·1379					
11. 0	27. 15	16. 40	·1302					
11. 8	27. 15	16. 44	·1311					
11. 23	23. 35	17. 10	·1268					
11. 27	23. 0	17. 20	·1288					
11. 38	18. 10	17. 34	·1328					
11. 51	16. 40	17. 44	·1328					
12. 30	21. 0	17. 50	·1338					
12. 41	21. 25	18. 2	·1335					
12. 47	18. 5	18. 12	·1314					
13. 11	15. 50	18. 27	·1308					
13. 27	17. 30	18. 39	·1295					
13. 40	14. 5	18. 49	·1305					
14. 8	17. 5	19. 0	·1298					
14. 23	25. 0	19. 7	·1299					
14. 39	33. 5	19. 18	·1282					
14. 56	37. 5	19. 24	·1286					
15. 6	38. 0	19. 30	·1285					
15. 11	36. 40	19. 49	·1300					
15. 16	36. 40	20. 24	·1280					
15. 24	34. 45	20. 35	·1284					
15. 31	36. 15	20. 50	·1276					
15. 38	34. 50	21. 12	·1269					
15. 47	38. 15	21. 30	·1289					
15. 53	37. 50	21. 41	·1285					
16. 0	39. 20	22. 0	·1301					
16. 7	39. 50	22. 8	·1301					
16. 12	42. 35	22. 16	·1311					
16. 16	42. 20	22. 25	·1305					
16. 23	44. 5	22. 49	·1317					
16. 37	38. 50	23. 4	·1315					
16. 53	48. 45	23. 7	·1324					
16. 59	47. 10	23. 45	·1331					
17. 8	46. 55	23. 59	·1327					
17. 12	43. 35							
17. 17	42. 5							
17. 26	45. 50							
17. 28	44. 30							
17. 37	45. 20							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 10								
h m	° ′ ″	h m		h m		h m	°	°
17. 43	20. 40. 0							
17. 53	42. 40							
17. 58	41. 10							
18. 9	38. 30							
18. 12	38. 30							
18. 23	35. 10							
18. 30	39. 5							
18. 37	36. 55							
18. 44	31. 0							
18. 53	29. 45							
18. 58	30. 25							
19. 13	28. 35							
19. 26	34. 20							
19. 37	31. 10							
	***							
19. 56	30. 55							
20. 8	31. 55							
20. 9	31. 30							
20. 11	34. 5							
20. 22	35. 45							
20. 26	34. 55							
20. 41	38. 30							
21. 9	37. 5							
21. 15	37. 5							
21. 26	35. 35							
21. 40	34. 50							
21. 43	33. 30							
21. 56	34. 35							
22. 5	34. 20							
22. 11	35. 25							
22. 23	34. 5							
22. 53	34. 30							
22. 57	33. 20							
23. 13	34. 50							
23. 19	34. 20							
23. 56	36. 5							
23. 59	36. 55							
June 11		June 11		June 11		June 11		
0. 0	20. 36. 55	0. 0	·1327	0. 0	·03368	1. 0	63·8	64·6
	***	0. 12	·1330	0. 28	·03364	Max.	64·2	65·2
1. 0	41. 20	0. 29	·1309		***	9. 0	62·0	63·0
1. 24	41. 35	0. 38	·1314	1. 30	·03377	Min.	59·8	60·5
1. 39	41. 50	0. 41	·1309	3. 2	·03438	21. 0	60·9	61·6
1. 48	43. 5	0. 47	·1316	3. 39	·03445			
1. 56	42. 30	0. 49	·1309	4. 14	·03440			
2. 3	42. 40	0. 56	·1313	4. 53	·03408			
2. 9	41. 40	1. 32	·1323	6. 0	·03390			
2. 24	41. 40	2. 7	·1344	6. 56	·03359			
2. 37	42. 50	2. 42	·1348	7. 9	·03366			
2. 51	41. 45	2. 53	·1346	8. 53	·03354			
2. 58	39. 35	3. 7	·1324	11. 52	·03292			
3. 3	40. 30	3. 14	·1330	12. 51	·03278			
3. 9	39. 25	3. 23	·1325	13. 14	·03258			
3. 12	37. 0	3. 41	·1321	13. 39	·03254			
3. 23	35. 25	3. 48	·1326	13. 53	·03268			
3. 31	39. 30	3. 53	·1324	14. 10	·03241			
3. 40	40. 20	4. 18	·1364	14. 39	·03209			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 11		June 11		June 11				
h m	° ′ ″	h m		h m		h m	°	°
3. 47	20. 37. 55	4. 49	·1355	16. 26	·03210			
3. 57	34. 30	5. 16	·1359	17. 33	·03174			
4. 8	33. 25	5. 24	·1356	18. 24	·03183			
4. 12	35. 0	5. 33	·1363	18. 41	·03172			
4. 38	35. 50	5. 48	·1360	19. 53	·03177			
4. 43	34. 55	5. 51	·1353	21. 57	·03152			
5. 1	35. 10	6. 6	·1359	23. 59	·03173			
5. 11	34. 55	6. 24	·1361					
5. 23	33. 50	6. 29	·1366					
5. 38	33. 30	6. 52	·1353					
5. 44	33. 10	7. 11	·1362					
5. 52	32. 0	7. 17	·1360					
6. 11	31. 55	8. 25	·1364					
6. 25	32. 10	8. 35	·1353					
6. 39	32. 50	8. 44	·1356					
6. 53	31. 25	9. 17	·1353					
7. 9	30. 55	10. 15	·1358					
7. 24	30. 30	10. 32	·1356					
7. 46	30. 30	11. 56	·1359					
8. 11	29. 25	12. 12	·1355					
8. 23	30. 5	12. 45	·1357					
8. 27	30. 5	13. 18	·1366					
8. 37	29. 0	13. 26	·1360					
8. 42	28. 30	13. 42	·1358					
8. 57	28. 0	13. 51	·1371					
9. 8	26. 55	14. 2	·1367					
9. 12	24. 30	14. 17	·1378					
9. 23	23. 30	14. 53	·1362					
9. 38	23. 30	15. 21	·1359					
10. 8	27. 35	15. 26	1363					
10. 24	29. 0	16. 0	·1354					
10. 53	29. 30	16. 26	·1357					
11. 9	29. 30	17. 11	·1345					
12. 15	28. 45	17. 15	·1347					
12. 33	29. 5	17. 38	·1343					
12. 43	28. 30	17. 52	·1350					
12. 53	29. 30	18. 31	·1364					
13. 6	26. 30	18. 55	·1361					
13. 10	24. 5	19. 4	·1358					
13. 28	24. 5	19. 18	·1361					
13. 38	23. 5	20. 30	·1348					
13. 42	24. 25	20. 41	·1350					
13. 54	29. 0	22. 3	·1335					
14. 8	28. 50	22. 32	·1340					
14. 14	29. 10	22. 42	·1336					
14. 30	25. 30	23. 59	·1356					
14. 41	26. 5							
15. 3	25. 55							
15. 22	23. 10							
15. 26	25. 0							
15. 34	24. 10							
15. 52	25. 30							
16. 7	25. 0							
16. 12	26. 10							
16. 24	26. 5							
16. 39	25. 10							
16. 44	25. 35							
16. 54	24. 55							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 11								
h m	° ′ ″	h m		h m		h m	°	°
17. 3	20. 25. 55							
17. 9	24. 55							
17. 24	27. 0							
17. 38	26. 35							
17. 45	27. 30							
17. 53	25. 35							
18. 1	25. 0							
18. 9	23. 55							
18. 13	24. 50							
18. 26	27. 55							
18. 29	26. 20							
18. 39	24. 45							
18. 52	24. 15							
18. 57	21. 30							
19. 2	23. 25							
19. 14	24. 5							
19. 25	23. 30							
19. 34	23. 30							
19. 39	24. 55							
19. 42	23. 50							
19. 55	24. 30							
19. 59	23. 40							
20. 11	25. 0							
20. 26	23. 30							
20. 37	23. 50							
20. 41	23. 10							
20. 53	24. 0							
21. 8	23. 35							
21. 11	25. 30							
21. 26	25. 30							
21. 39	27. 0							
22. 6	27. 30							
22. 47	30. 10							
23. 11	32. 25							
23. 22	32. 25							
23. 38	33. 35							
23. 43	33. 35							
23. 59	36. 5							
June 12		June 12		June 12		June 12		
0. 0	20. 36. 5	0. 0	·1356	0. 0	·03173	1. 0	61·2	63·0
0. 13	35. 50	0. 14	·1353	5. 45	·03243	3. 0	61·0	63·4
0. 25	36. 15	1. 48	·1363	5. 54	·03238	Max.	62·4	63·9
0. 30	36. 0	2. 3	·1361	8. 23	·03257	9. 0	60·6	61·0
0. 41	36. 25	3. 19	·1367	8. 56	·03270	Min.	60·0	60·3
0. 49	36. 15	4. 45	·1364	10. 44	·03210	21. 0	60·5	61·8
0. 57	36. 30	5. 0	·1371	11. 53	·03207			
1. 24	36. 50	5. 6	·1367	15. 26	·03184			
1. 46	37. 35	5. 13	·1372	16. 4	·03173			
1. 58	37. 25	5. 24	·1365	16. 33	·03185			
2. 9	37. 40	5. 27	·1375	17. 12	·03181			
3. 58	35. 55	5. 43	·1372	17. 33	·03176			
4. 41	34. 0	5. 55	·1377	17. 40	·03182			
4. 56	34. 25	6. 21	·1372	19. 7	·03186			
5. 3	33. 55	6. 42	·1374	22. 42	·03158			
5. 15	33. 15	6. 52	·1384	23. 59	·03162			
5. 31	33. 15	7. 34	·1376					
5. 56	33. 35	7. 58	·1388					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 12		June 12						
h m	° ′ ″	h m		h m		h m	°	°
6. 1	20. 33. 0	8. 8	·1388					
6. 17	32. 30	8. 39	·1366					
6. 32	32. 20	8. 51	·1388					
6. 38	31. 40	9. 32	·1364					
6. 56	32. 10	9. 56	·1359					
7. 30	30. 30	10. 11	·1365					
7. 52	30. 30	11. 14	·1357					
8. 8	30. 5	11. 35	·1362					
8. 12	30. 5	11. 52	·1357					
8. 23	29. 5	12. 13	·1360					
8. 27	29. 5	12. 21	·1358					
8. 41	27. 5	13. 11	·1362					
8. 46	25. 0	13. 32	·1356					
8. 55	19. 30	14. 5	·1364					
9. 0	19. 30	14. 52	·1363					
9. 15	22. 30	15. 47	·1367					
9. 26	19. 55	16. 13	·1362					
9. 35	19. 55	16. 34	·1363					
9. 56	26. 10	17. 24	·1357					
10. 8	26. 10	17. 33	·1358					
10. 11	27. 5	17. 46	·1349					
10. 15	27. 5	17. 57	·1348					
10. 26	27. 35	18. 42	·1354					
10. 33	26. 10	19. 21	·1353					
10. 44	25. 30	20. 12	·1350					
10. 55	26. 0	20. 47	·1352					
10. 59	25. 25	21. 42	·1345					
11. 14	26. 30	22. 34	·1348					
11. 26	26. 30	22. 57	·1347					
11. 41	27. 35	23. 13	·1354					
11. 55	27. 30	23. 59	·1355					
12. 5	28. 0							
12. 12	28. 30							
12. 41	28. 40							
13. 13	29. 55							
13. 23	31. 30							
13. 29	31. 30							
13. 34	32. 35							
14. 14	31. 0							
14. 30	31. 5							
14. 39	30. 5							
14. 55	29. 25							
15. 15	29. 55							
15. 38	27. 40							
15. 56	27. 0							
16. 11	26. 50							
16. 27	28. 35							
16. 39	28. 0							
16. 50	26. 55							
17. 3	26. 55							
17. 9	27. 10							
17. 15	26. 5							
17. 26	27. 30							
17. 30	27. 30							
17. 39	28. 25							
17. 50	26. 50							
18. 4	26. 50							
18. 16	27. 40							
June 12								
h m	° ′ ″	h m		h m		h m	°	°
18. 39	20. 27. 30							
18. 58	25. 35							
19. 15	29. 10							
19. 56	25. 40							
20. 18	27. 5							
21. 11	27. 0							
21. 39	28. 0							
23. 11	32. 40							
23. 23	34. 5							
23. 43	34. 35							
23. 56	34. 10							
23. 59	35. 15							
June 13		June 13		June 13		June 13		
0. 0	20. 35. 15	0. 0	·1355	0. 0	·03162	1. 0	61·6	63·3
0. 11	35. 0	0. 41	·1355	2. 46	·03210	3. 0	61·9	63·9
1. 55	36. 5	1. 8	·1353	4. 29	·03260	Max.	63·4	65·1
2. 9	35. 45		***	4. 46	·03258	9. 0	62·4	64·6
2. 38	36. 5	2. 35	·1357	6. 16	·03295	Min.	61·5	62·6
2. 43	35. 35	2. 40	·1354	6. 45	·03318	21. 0	61·6	63·7
3. 9	35. 35	3. 5	·1359	7. 11	·03307	22. 0	61·6	63·8
3. 23	35. 5	3. 43	·1358	8. 43	·03313	23. 0	61·6	63·9
3. 54	34. 5	4. 9	·1373	11. 57	·03284			
4. 11	34. 40	4. 18	·1375	12. 48	·03271			
4. 28	33. 10	4. 30	·1366	13. 16	·03242			
4. 45	32. 40	4. 38	·1367	14. 18	·03253			
5. 9	33. 0	4. 44	·1364	15. 26	·03248			
	***	5. 10	·1370	16. 39	·03263			
5. 46	31. 5	5. 14	·1368	17. 38	·03247			
6. 1	29. 35	5. 33	·1370	18. 29	·03253			
6. 23	28. 50	5. 40	·1365	23. 59	·03249			
6. 43	31. 0	5. 58	·1363					
7. 6	29. 5	6. 23	·1371					
7. 19	28. 55	6. 35	·1378					
7. 28	29. 5	6. 56	·1365					
7. 37	28. 40	7. 10	·1368					
8. 26	29. 55	7. 24	·1366					
8. 42	29. 25	7. 45	·1370					
9. 9	30. 0	8. 4	·1367					
9. 27	29. 50	8. 22	·1369					
9. 45	30. 10	8. 51	·1361					
10. 11	29. 35	9. 37	·1365					
10. 54	29. 5	10. 10	·1362					
11. 3	29. 35	11. 13	·1365					
11. 11	29. 5	11. 41	·1370					
11. 44	30. 0	12. 20	·1364					
11. 56	28. 50	12. 35	·1377					
12. 13	29. 30	12. 42	·1378					
12. 25	29. 5	13. 12	·1365					
12. 41	33. 5	13. 53	·1362					
13. 10	30. 30	14. 36	·1371					
13. 43	27. 5	15. 2	·1367					
13. 55	27. 10	15. 11	·1370					
14. 9	26. 55	15. 48	·1356					
14. 15	25. 10	16. 45	·1363					
14. 38	26. 0	17. 2	·1360					
14. 41	25. 5	17. 13	·1362					
14. 55	25. 5	17. 40	·1348					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 13		June 13						
h m	° ′ ″	h m		h m		h m	°	°
15. 0	20. 25. 40	18. 14	·1353					
15. 18	23. 55	18. 46	·1351					
16. 13	25. 40	19. 55	·1354					
16. 23	26. 50	20. 39	·1345					
16. 28	26. 20	20. 50	·1346					
16. 44	27. 5	21. 9	·1343					
16. 58	26. 0	21. 16	·1345					
17. 9	26. 30	21. 46	·1337					
17. 12	27. 40	22. 40	·1344					
17. 25	28. 10	22. 58	·1342					
17. 33	27. 25	23. 21	·1346					
17. 44	28. 5	23. 35	·1344					
17. 52	29. 30	23. 45	·1349					
18. 7	27. 0	23. 59	·1346					
18. 32	25. 15							
18. 52	25. 0							
19. 2	26. 5							
19. 11	25. 55							
19. 14	26. 40							
19. 26	26. 40							
19. 49	25. 10							
20. 7	26. 5							
20. 27	25. 45							
20. 36	26. 0							
20. 41	26. 55							
20. 59	27. 10							
21. 26	29. 30							
21. 41	30. 5							
21. 56	31. 0							
22. 13	31. 30							
22. 24	31. 5							
22. 34	32. 0							
22. 43	32. 15							
23. 22	33. 50							
23. 27	33. 35							
23. 41	34. 30							
23. 55	34. 0							
23. 59	34. 30							
June 14		June 14		June 14		June 14		
0. 0	20. 34. 30	0. 0	·1346	0. 0	·03249	0. 0	62 ·1	64 ·0
0. 23	34. 10	0. 43	·1355	3. 1	·03307	1. 0	62 ·6	64 ·8
1. 4	34. 55	1. 12	·1362	3. 12	·03339	2. 0	62 ·6	64 ·2
1. 23	36. 30	1. 24	·1357	3. 18	·03318	3. 0	62 ·6	65 ·0
1. 30	38. 5	1. 39	·1364		***	Max.	63 ·1	65 ·9
1. 48	39. 0	2. 5	·1365	3. 45	·03323	9. 0	61 ·8	63 ·3
2. 9	38. 40	2. 19	·1347	4. 9	·03342	Min.	60 ·2	62 ·2
2. 15	41. 25	2. 24	·1359	4. 18	·03337	21. 0	60 ·6	63 ·0
2. 27	38. 35	2. 39	·1345	6. 17	·03350	22. 0	61 ·3	63 ·0
2. 46	37. 10	2. 45	·1351	6. 19	·03342	23. 0	61 ·4	63 ·2
2. 56	37. 20	2. 53	·1347	6. 35	·03350			
3. 11	36. 0	3. 16	·1354	8. 43	·03351			
3. 23	38. 55	3. 19	·1348	11. 11	·03279			
3. 30	37. 35	3. 27	·1379	11. 44	·03272			
3. 39	38. 0	3. 41	·1362	13. 0	·03266			
3. 48	37. 30	4. 7	·1353	13. 33	·03243			
4. 11	38. 0	4. 8	·1360	14. 1	·03257			
4. 22	38. 55	4. 14	·1359	14. 24	·03248			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 14		June 14		June 14				
h m	° ′ ″	h m		h m				
4. 26	20. 37. 30	4. 28	·1371	15. 11	·03248			
4. 42	36. 25	4. 41	·1359	16. 1	·03266			
4. 53	35. 40	4. 52	·1356	18. 55	·03248			
5. 18	34. 5	5. 11	·1360	19. 44	·03251			
6. 0	33. 5	5. 25	·1357	20. 38	·03232			
6. 17	33. 40	5. 34	·1365	22. 8	·03229			
6. 25	32. 30	5. 56	·1366	23. 59	·03221			
6. 56	32. 10	6. 21	·1371					
7. 24	31. 30	6. 31	·1363					
7. 41	31. 0	6. 46	·1370					
7. 57	30. 20	7. 0	·1367					
8. 15	31. 5	7. 48	·1365					
8. 55	30. 30	8. 6	·1369					
9. 26	30. 30	9. 4:	·1366					
9. 52	27. 35	10. 14	·1377					
10. 1	27. 30	10. 43	·1389					
10. 14	28. 5	10. 53	·1389					
10. 26	27. 10	11. 11	·1373					
10. 40	28. 25	11. 22	·1378					
10. 48	27. 55	11. 23	·1383					
10. 58	28. 40	12. 18	·1364					
11. 18	26. 20	12. 41	·1362					
11. 26	26. 20	12. 52	·1366					
11. 45	22. 40	13. 0	·1363					
12. 6	23. 30	13. 21:	·1374					
12. 26	26. 5	13. 47	·1363					
12. 45	27. 0	13. 55	·1370					
13. 11	27. 0	14. 7	·1362					
13. 23	28. 55	14. 13	·1359					
13. 41	26. 30	14. 50	·1368					
13. 44	25. 0	15. 5	·1365					
13. 51	27. 35	15. 14	·1366					
13. 55	27. 50	15. 26	·1361					
14. 8	31. 20	16. 33	·1366					
14. 15	30. 35	16. 50	·1360					
14. 26	31. 40	17. 22	·1357					
14. 35	30. 55	18. 41	·1359					
14. 41	31. 40	19. 17	·1353					
14. 45	31. 0	19. 25	·1356					
15. 2	30. 25	19. 50	·1347					
15. 12	28. 55	20. 1	·1348					
15. 40	28. 0	20. 11	·1345					
15. 52	28. 0	20. 36	·1346					
16. 55	24. 40	20. 44	·1337					
17. 0	25. 45	20. 52	·1340					
17. 8	24. 30	21. 12	·1336					
17. 25	24. 45	21. 32	·1346					
17. 30	26. 0	21. 52	·1335					
17. 39	26. 40	22. 15	·1337					
17. 46	25. 10	22. 43	·1331					
17. 51	26. 0	23. 2	·1337					
17. 56	24. 35	23. 16	·1328					
18. 2	25. 40	23. 34	·1330					
18. 8	25. 5	23. 40	·1326					
18. 24	26. 20	23. 47	·1335					
18. 35	25. 55	23. 51	·1328					
18. 41	26. 10	23. 59	·1334					
18. 53	25. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
June 14								
h m	° ′ ″	h m		h m		h m	°	°
18. 56	20. 26. 0							
19. 38	29. 35							
19. 46	29. 0							
19. 56	30. 5							
20. 25	30. 10							
20. 33	31. 5							
20. 41	30. 10							
20. 58	33. 30							
21. 28	35. 10							
21. 42	34. 35							
21. 56	35. 40							
22. 12	35. 5							
22. 34	36. 5							
22. 39	35. 30							
22. 45	36. 10							
23. 11	36. 30							
23. 24	38. 5							
23. 40	37. 5							
23. 43	37. 55							
23. 52	37. 30							
23. 59	38. 55							
June 15		June 15		June 15		June 15		
0. 0	20. 38. 55	0. 0	·1334	0. 0	·03221	0. 0	61·8	63·5
0. 14	39. 25	0. 23	·1348	1. 3	·03233	Min.	61·8	63·5
0. 25	40. 40	0. 44	·1344	2. 4	·03246	1. 0	62·0	64·0
0. 34	39. 45	1. 26	·1361	2. 40	·03284	2. 0	62·0	64·3
0. 42	38. 15	1. 36	·1356	2. 54	·03280	3. 0	62·6	64·6
0. 56	37. 0	2. 8	·1352	4. 8	·03337	9. 0	62·6	65·0
1. 23	38. 30	2. 21	·1357	5. 19	·03361	Max.	64·0	65·6
1. 30	37. 55	2. 26	·1353	5. 34	·03352	21. 0	62·4	63·8
2. 9	37. 0	2. 43	·1377	5. 48	·03357			
2. 15	38. 5	2. 59	·1362	11. 23	·03319			
2. 26	37. 35	3. 28	·1353	12. 34	·03278			
2. 41	38. 40	3. 41	·1343	12. 55	·03284			
2. 53	36. 30	3. 51	·1349	13. 0	·03271			
3. 23	38. 10	4. 2	·1342	13. 9	·03268			
3. 39	37. 20	4. 11	·1352	13. 38	·03229			
3. 50	38. 0	4. 18	·1349	13. 53	·03221			
4. 1	36. 5	4. 27	·1356	14. 24	·03243			
4. 8	36. 50	4. 41	·1346	14. 29	·03239			
4. 12	35. 45	4. 45	·1353	14. 37	·03257			
4. 27	35. 30	5. 18	·1374	14. 48	·03254			
4. 39	30. 35	5. 31	·1361	15. 7	·03231			
4. 46	30. 25	5. 40	·1366	15. 58	·03228			
5. 1	33. 5	6. 4	·1350	17. 3	·03261			
5. 14:	36. 0	6. 29	·1364	17. 58	·03268			
5. 26	33. 50	7. 2	·1369	18. 38	·03281			
5. 39	33. 30	7. 24	·1368	21. 8	·03279			
5. 55	32. 50	7. 41	·1376	23. 48	·03252			
6. 57	31. 10	7. 49	·1371	23. 59	·03257			
7. 23	31. 40	8. 0	·1375					
7. 35	30. 55	8. 22	·1364					
7. 57	31. 5	9. 2	·1362					
8. 12	31. 30		***					
8. 41	30. 55	9. 57	·1371					
9. 10	30. 30	10. 19	·1363					
9. 29	30. 0	10. 29	·1366					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
June 15		June 15						
h m	° ′ ″	h m		h m		h m	°	°
9. 46	20. 30. 5	10. 39	·1359					
10. 1	30. 55	10. 45	·1361					
10. 9	29. 5	10. 51	·1354					
10. 14	29. 5	11. 3	·1359					
10. 22	27. 40	11. 7	·1357					
10. 38	24. 10	11. 15	·1365					
10. 52	20. 10	11. 19	·1360					
10. 59	19. 25	11. 30	·1366					
11. 38	29. 25	11. 33	·1364					
11. 56	29. 25	11. 41	·1366					
12. 11	25. 25	12. 9	·1353					
12. 23	25. 25	12. 21	·1355					
12. 27	27. 0	12. 36	·1354					
13. 14	31. 0	12. 54	·1365					
13. 24	28. 10	12. 56	·1374					
13. 28	26. 55	13. 0	·1371					
13. 43	25. 30	13. 18	·1389					
13. 55	23. 10	13. 24	·1385					
14. 9	21. 55	13. 28	·1390					
14. 16	24. 5	13. 38	·1382					
14. 24	26. 55	13. 45	·1379					
14. 31	26. 15	14. 17	·1347					
14. 52	32. 10	14. 19	·1355					
15. 26	31. 55	14. 35	·1345					
15. 37	29. 45	14. 51	·1360					
15. 41	30. 35	15. 17	·1343					
15. 56	28. 10	15. 26	·1346					
16. 6	26. 30	15. 45	·1355					
16. 13	26. 45	15. 50	·1358					
16. 23	25. 40	16. 4	·1356					
16. 32	28. 0	16. 11	·1359					
16. 41	27. 20	16. 45	·1343					
17. 4	27. 30	16. 50	·1342					
17. 12	28. 50	17. 12	·1353					
17. 17	26. 30	17. 17	·1347					
17. 25	28. 0	17. 49	·1353					
17. 37	27. 25	17. 57	·1349					
17. 45	27. 40	18. 45	·1344					
17. 54	26. 10	18. 51	·1347					
18. 29	24. 50		***					
19. 26	26. 50	19. 42	·1340					
19. 32	26. 0	19. 49	·1342					
19. 38	26. 50	20. 16	·1332					
19. 52	25. 5	20. 37	·1336					
20. 1	24. 55	20. 41	·1330					
20. 9	27. 5	21. 10	·1332					
20. 25	27. 50	22. 0	·1344					
20. 32	29. 35	22. 37	·1346					
20. 39	28. 55	22. 48	·1343					
20. 54	28. 45	23. 39	·1344					
21. 8	27. 0	23. 54	·1327					
21. 41	28. 35	23. 59	·1329					
21. 52	28. 5							
22. 32	31. 0							
23. 38	33. 55							
23. 52	33. 30							
23. 59	34. 55							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 16		June 16		June 16		June 16		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 34. 55	0. 0	·1329	0. 0	·03257	1. 0	62·6	64·6
0. 12	35. 0	0. 11	·1335	2. 31	·03336	3. 0	62·8	66·0
0. 29	33. 35	0. 19	·1329	2. 44	·03322	Max.	63·0	66·0
0. 43	33. 15	0. 46	·1328	3. 25	·03359	9. 0	62·6	64·2
1. 8	34. 35	0. 52	·1334	3. 42	·03348	Min.	61·6	62·8
1. 26	36. 20	1. 4	·1342	4. 44	·03331	21. 0	61·6	63·4
1. 36	38. 5	1. 40	·1345	6. 4	·03335			
1. 44	37. 0	1. 46	·1341	6. 14	·03341			
1. 56	39. 20	1. 49	·1352	6. 19	·03333			
2. 12	40. 5	1. 56	·1349	8. 7	·03338			
2. 23	37. 10	2. 14	·1358	10. 33	·03318			
2. 27	38. 5	2. 22	·1345	11. 18	·03257			
2. 39	38. 5		***	11. 45	·03253			
2. 41	39. 0	2. 53	·1359	13. 33	·03276			
2. 47	38. 35	3. 13	·1334	15. 3	·03283			
2. 57	39. 35	3. 22	·1335	18. 11	·03250			
3. 7	36. 50	3. 27	·1346	20. 53	·03253			
3. 12	37. 10	3. 34	·1345	23. 59	·03259			
3. 25	37. 10	3. 49	·1363					
3. 28	38. 5	3. 58	·1357					
3. 33	37. 30	4. 15	·1367					
3. 41	38. 25	4. 39	·1366					
3. 53	37. 30	4. 47	·1369					
4. 0	35. 45	5. 16	·1363					
4. 41	34. 30	5. 37	·1368					
5. 41	33. 10	5. 42	·1365					
6. 4	33. 20	5. 49	·1371					
6. 15	32. 35	6. 1	·1369					
6. 29	32. 50	6. 14	·1374					
6. 41	32. 0	6. 24	·1368					
6. 54	32. 0	6. 31	·1377					
7. 37	30. 55	6. 41	·1368					
8. 8	31. 0	7. 7	·1370					
8. 12	30. 20	7. 14	·1375					
8. 15	31. 35	7. 26	·1370					
8. 23	30. 30	7. 39	·1374					
8. 41	31. 5	7. 53	·1372					
9. 4	28. 5	8. 0	·1379					
9. 13	28. 35	8. 31	·1373					
9. 26	27. 35	8. 38	·1367					
9. 37	28. 40	8. 54	·1369					
9. 46	17. 25	9. 5	·1361					
9. 56	17. 25	9. 13	·1366					
10. 23	26. 30	9. 44	·1346					
10. 29	29. 35	10. 4	·1371					
10. 42	30. 10	10. 30	·1359					
11. 0	35. 30	10. 56	·1389					
11. 12	34. 25	11. 26	·1370					
11. 27	31. 30	11. 51	·1364					
11. 35	30. 55	12. 7	·1366					
11. 54	25. 10	12. 21	·1363					
12. 6	24. 50	12. 34	·1360					
12. 23	25. 45	12. 41	·1365					
12. 31	26. 0	13. 4	·1356					
12. 33	24. 55	13. 7	·1361					
12. 40	25. 55	13. 25	·1356					
13. 13	27. 45	14. 10	·1361					
13. 22	27. 5	15. 18	·1359					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 16		June 16						
h m	° ′ ″	h m		h m		h m	°	°
13. 47	20. 30. 0	15. 23	·1363					
14. 1	28. 30	15. 56	·1354					
14. 36	26. 40	17. 15	·1358					
15. 4	28. 45	17. 42	·1354					
15. 14	26. 10	17. 48	·1357					
15. 27	26. 55	18. 12	·1348					
15. 42	29. 25	18. 32	·1353					
15. 52	28. 50	18. 42	·1347					
15. 57	28. 50	18. 57	·1352					
16. 12	27. 10	19. 23	·1350					
16. 35	27. 35	20. 7	·1360					
16. 49	29. 30	20. 19	·1355					
16. 58	28. 0	20. 43	·1362					
17. 6	29. 5		***					
17. 24	28. 0	22. 29	·1344					
17. 31	28. 15	22. 56	·1347					
17. 43	30. 50	23. 32	·1343					
17. 55	29. 40	23. 49	·1347					
18. 3	30. 25	23. 59	·1343					
18. 12	28. 50							
18. 23	30. 40							
18. 27	29. 50							
18. 33	30. 40							
18. 40	28. 20							
18. 44	28. 0							
18. 53	28. 35							
19. 26	26. 10							
19. 35	26. 20							
19. 51	24. 30							
20. 5	25. 40							
20. 9	24. 20							
20. 18	25. 55							
20. 26	25. 25							
20. 54	27. 35							
21. 7	27. 5							
21. 11	28. 0							
21. 27	27. 10							
21. 38	28. 30							
21. 56	29. 55							
22. 2	30. 35							
22. 23	31. 15							
22. 44	31. 40							
22. 58	32. 30							
23. 4	33. 15							
23. 10	32. 30							
23. 39	33. 35							
23. 52	34. 30							
23. 59	36. 5							
June 17		June 17		June 17		June 17		
0. 0	20. 36. 5	0. 0	·1343	0. 0	·03259	1. 0	62·6	64·4
0. 11	35. 30	0. 12	·1352	2. 16	·03309	3. 0	62·7	65·0
0. 18	36. 50	0. 25	·1344	3. 59	·03337	Max.	63·8	65·7
0. 38	36. 10	0. 41	·1354		***	9. 0	62·6	64·2
0. 41	37. 20	1. 4	·1353	7. 52	·03348	Min.	60·8	62·3
0. 48	37. 35	1. 34	·1360	11. 46	·03273	21. 30	60·8	62·7
0. 55	36. 30	1. 50	·1369	12. 55	·03269			
1. 26	38. 0	1. 57	·1365	18. 6	·03248			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 17		June 17		June 17				
h m	° ′ ″	h m		h m		h m	°	
1.35	20.38.35	2.20	·1354	20.47	·03211			
1.41	38.20	2.41	·1367	22.59	·03203			
1.51	37. 0	2.44	·1366	23.59	·03210			
2.23	30.15	2.49	·1368					
2.27	36.25	3.12	·1359					
2.38	34. 5	3.23	·1367					
2.59	33.45	3.35	·1363					
3. 9	34.25		***					
	***	3.54	·1353					
3.39	34.10		***					
3.42	33.35	4.46	·1371					
3.53	33. 5		***					
3.58	31.30	5.35	·1368					
4.16	30.35	6. 0	·1380					
4.42	31.20	6.15	·1370					
	***	6.22	·1376					
5. 5	31. 5	6.44	·1368					
5. 9	31.50	7.27	·1372					
5.26	31.15	9. 4	·1363					
	***	9.41	·1368					
5.55	32.30	10.21	·1361					
6. 9	31.20	10.32	·1363					
6.27	31.55	11. 6:	·1360					
6.53	31.30	11.40	·1369					
6.56	31.55	12.45	·1362					
7. 8	31.25	12.53	·1367					
7.15	31.35	13.49	·1361					
7.36	30.30	14.53	·1360					
7.52	30.45	14.58	·1364					
8. 2	30.20	16.32	·1357					
8.29	31.10		***					
8.41	30.15	17.10	·1360					
8.52	30.35		***					
8.57	29.50	19.58	·1356					
9. 9	30.25	20.57	·1357					
9.27	29. 0	21.40	·1354					
9.38	30.35	22.20	·1356					
9.42	28.45	22.40	·1348					
9.55	28.45	23. 5	·1352					
10. 3	29.35	23.10	·1347					
10. 9	28.40	23.59	·1359					
10.23	28.40							
10.34	29.20							
10.47	29. 5							
11.16	29.20							
11.32	29.55							
11.39	29.10							
11.44	28.55							
12. 2	29.15							
12.28	28.20							
12.38	28.45							
12.43	28. 0							
13.44	27.55							
14.12	29.45							
14.25	28.30							
14.53	27.40							
15. 8	28.40							
15.26	27.10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 17								
h m	° ′ ″			h m		h m	°	°
15.38	20.27.40							
15.41	27. 5							
16. 2	28.10							
16.23	26.35							
16.51	26.40							
16.58	25.45							
17.22	26.50							
17.35	24.45							
17.42	26. 0							
17.48	24.45							
18. 9	25.50							
18.54	24.45							
19.56	26. 0							
20. 9	25.35							
20.49	27.30							
21.13	27.20							
21.38	28. 5							
21.42	27.20							
21.48	28. 5							
22.12	29.40							
22.39	31. 5							
22.42	32.10							
22.59	32.35							
23.11	32.25							
23.27	33.20							
23.59	33.10							
June 18		June 18		June 18		June 18		
0. 0	20.33.10	0. 0	·1359	0. 0	·03210	1. 0	61·6	63·1
0.26	33.35	0.40	·1352	0.45	·03220	Max.	62·2	63·
0.37	34.10	0.55	·1362	2.37	·03233	9. 0	61·3	63·
0.41	33.25	1. 8	·1363	3.38	·03251	Min.	60·5	62·
0.53	34.55	1.34	·1368	3.56	·03242	21. 0	60·5	62·
0.59	34.55	1.44	·1363	4.30	·03236			
1.29	36.45	2. 9	·1366	5.43	·03262			
1.43	36. 5	2.20	·1355	8.38	·03257			
2. 4	35.55	2.35	·1354	14.48	·03211			
2.11	35. 5	2.52	·1335	19.58	·03183			
2.38	36.50	3. 0	·1356	20.53	·03169			
2.53	36.35	3.45	·1372	23.59	·03170			
3.16	32.20	4. 4	·1366					
3.27	32.20	4.22	·1369					
3.41	33. 0	4.36	·1377					
3.57	32.30	4.55	·1371					
4.10	32.45	5.11	·1379					
4.22	32.30	5.35	·1385					
4.31	33. 5	5.48	·1392					
4.46	32.40	6.12	·1373					
4.58	33. 5	6.24	·1377					
5.31	32. 5	6.30	·1374					
5.45	32.40	6.45	·1379					
6. 9	31.25	6.55	·1374					
6.24	31.30	7.13	·1374					
6.35	31. 0	7.34	·1378					
6.45	31.15	7.45	·1373					
6.53	30.45	8.53	·1370					
7.11	30.20	9.22	·1374					
7.30	30.45	9.39	·1372					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 18		June 18						
h m	° ′ ″	h m		h m		h m	°	
7. 41	20. 30. 10	10. 2	·1374					
7. 48	30. 35	10. 22	·1370					
8. 8	30. 35	10. 32	·1371					
8. 25	29. 35	10. 52	·1366					
8. 44	30. 30	11. 28	·1368					
9. 1	27. 40	11. 39	·1366					
9. 14	27. 40	13. 7	·1370					
9. 36	26. 30	13. 32	·1367					
9. 42	27. 5	13. 49	·1369					
10. 3	26. 40	14. 23	·1366					
10. 24	25. 30	14. 41	·1370					
10. 55	28. 30	15. 5	·1364					
12. 8	29. 15	15. 40	·1362					
12. 25	29. 30	16. 25	·1365					
12. 59	29. 10	16. 38	·1366					
13. 16	28. 0	17. 14	·1362					
13. 32	28. 5	18. 2	·1363					
13. 41	28. 40		***					
14. 2	28. 5	21. 10	·1354					
14. 22	28. 0	21. 29	·1355					
14. 33	28. 35		***					
14. 48	27. 10	23. 24	·1359					
15. 26	26. 35	23. 59	·1351					
15. 47	28. 30							
16. 11	27. 35							
16. 23	25. 40							
16. 32	25. 40							
16. 46	24. 0							
17. 12	23. 55							
17. 31	24. 10							
18. 9	22. 30							
18. 26	23. 55							
18. 40	23. 20							
18. 56	23. 35							
	***							
19. 24	23. 0							
19. 46	24. 35							
20. 26	24. 35							
21. 13	26. 0							
22. 35	30. 35							
22. 41	32. 15							
22. 55	32. 0							
23. 26	34. 55							
23. 59	34. 55							
June 19		June 19		June 19		June 19		
0. 0	20. 34. 55	0. 0	·1351	0. 0	·03170	1. 0	60 ·9	62 ·8
0. 14	35. 35	0. 26	·1356	2. 53	·03198	3. 0	61 ·0	62 ·8
0. 41	34. 30	1. 13	·1358	5. 24	·03222	Max.	62 ·4	63 ·9
0. 55	34. 15	1. 25	·1366	6. 2	·03237	9. 0	61 ·2	63 ·0
1. 10	33. 10	1. 30	·1362	6. 38	·03224	Min.	59 ·9	61 ·2
1. 26	33. 40	1. 42	·1367	7. 38	·03243	21. 0	60 ·6	62 ·0
1. 36	34. 15	2. 2	·1362	7. 55	·03240			
1. 41	33. 50	2. 18	·1364	8. 10	·03244			
2. 9	33. 5	2. 33	·1360	11. 23	·03205			
2. 15	33. 35	2. 46	·1355	12. 25	·03207			
2. 25	33. 10	3. 3	·1362	12. 56	·03186			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 19		June 19		June 19				
h m	° ′ ″	h m		h				
2. 38	20. 34. 0	3. 25	·1360	16. 43	·03171			
2. 42	33. 10		***	18. 33	·03148			
2. 48	33. 10	3. 58	·1373	19. 59	·03152			
2. 56	33. 50	4. 16	·1371	23. 26	·03137			
3. 18	33. 0	4. 31	·1374	23. 59	·03144			
3. 46	33. 35	4. 45	·1368					
4. 12	33. 30	4. 54	·1370					
4. 41	32. 15	5. 22	·1366					
5. 14	30. 20	5. 35	·1367					
5. 26	27. 30	6. 0	·1390					
5. 31	27. 20	6. 14	·1391					
5. 38	25. 40	6. 49	·1375					
5. 42	25. 15	7. 8	·1383					
6. 10	29. 35	7. 17	·1382					
6. 17	29. 35	7. 25	·1387					
6. 27	30. 35	8. 0	·1374					
6. 36	30. 25	8. 6	·1377					
7. 2	31. 30	10. 32	·1372					
7. 17	31. 0	10. 58	·1377					
7. 35	31. 30	11. 24	·1370					
7. 57	28. 40	12. 6	·1368					
8. 42	30. 25	12. 33	·1375					
9. 5	29. 30	14. 9	·1363					
9. 22	29. 55	15. 7	·1369					
9. 31	30. 55	17. 8	·1366					
9. 40	30. 25	17. 19	·1362					
10. 28	30. 35	18. 22	·1368					
10. 36	30. 5	19. 10	·1366					
11. 4	30. 35	19. 41	·1368					
11. 32	29. 10	20. 30	·1363					
12. 10	29. 20	21. 47	·1366					
12. 26	32. 5		***					
12. 55	29. 55	23. 16	·1360					
13. 26	28. 0	23. 24	·1363					
13. 42	28. 10	23. 59	·1359					
13. 57	28. 50							
14. 10	30. 15							
14. 28	30. 25							
14. 55	28. 55							
15. 58	26. 10							
16. 11	26. 45							
16. 33	26. 10							
17. 16	25. 30							
17. 25	26. 5							
18. 24	27. 0							
18. 41	25. 50							
19. 22	26. 20							
20. 38	28. 5							
20. 52	27. 55							
20. 58	28. 25							
21. 11	27. 55							
21. 36	28. 50							
22. 27	31. 35							
23. 25	32. 5							
23. 44	32. 30							
23. 59	32. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
June 20		June 20		June 20		June 20			June 20								
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 32. 30	0. 0	·1359	0. 0	·03144	1. 0	61 ·6	63 ·0	18. 7	20. 24. 50							
0. 11	32. 10	0. 14	·1361	2. 24	·03199	3. 0	62 ·4	64 ·0	18. 12	25. 10							
0. 26	33. 15	0. 43	·1362	2. 48	·03193	Max.	63 ·1	65 ·0	18. 22	24. 25							
0. 37	33. 5	1. 24	·1359	2. 56	·03209	9. 0	61 ·8	64 ·1	18. 42	26. 0							
0. 57	33. 55	2. 23	·1375	6. 5	·03226	Min.	61 ·4	62 ·0	18. 54	25. 30							
1. 38	34. 35	2. 46	·1361	10. 44	·03242	21. 0	61 ·4	62 ·8	18. 58	26. 0							
1. 56	34. 35	3. 5	·1377	11. 58	·03235	22. 0	61 ·6	63 ·0	19. 5	25. 30							
2. 8	35. 10	3. 49	·1366	12. 38	·03213				19. 11	25. 30							
2. 26	35. 0	4. 25	·1370	13. 11	·03218				19. 23	24. 55							
2. 35	34. 20	5. 22	·1365	14. 3	·03202				19. 27	22. 0							
2. 40	34. 20	5. 45	·1367	14. 16	·03203				19. 41	26. 0							
2. 46	33. 55	6. 3	·1365	14. 43	·03194				19. 55	26. 35							
2. 57	34. 35	6. 15	·1369	15. 44	·03210				19. 58	25. 55							
3. 19	33. 0	6. 22	·1367	19. 19	·03190				20. 22	26. 20							
3. 42	33. 25	6. 31	·1371	19. 33	·03176				20. 28	25. 10							
4. 53	32. 5	6. 56	·1368	19. 44	·03187				20. 43	26. 30							
5. 10	31. 25	7. 9	·1370	20. 26	·03177				21. 26	27. 5							
5 29	30. 45	8. 14	·1369	20. 53	·03182				21. 38	29. 0							
5. 53	31. 10	8. 23	·1372	23. 59	·03169				21. 56	30. 30							
6. 1	30. 40	8. 32	·1370						22. 0	31. 20							
6. 38	31. 30	8. 47	·1374						22. 25	32. 25							
7. 0	30. 30	9. 33	·1377						22. 29	32. 5							
7. 23	30. 55	9. 53	·1375						22. 56	33. 40							
7. 48	31. 0	10. 8	·1377						23. 13	34. 55							
8. 8	31. 0	10. 18	·1375						23. 28	35. 25							
8. 27	30. 40	10. 40	·1380						23. 55	35. 5							
8. 42	31. 5	10. 46	·1377						23. 59	35. 0							
9. 14	30. 5	11. 41	·1375														
9. 23	30. 20	11. 58	·1384						June 21		June 21		June 21		June 21		
9. 44	30. 5	12. 51	·1380						0. 0	20. 35. 0	0. 0	·1358	0. 0	·03169	0. 0	62 ·0	63 ·5
10. 0	29. 45	13. 12	·1384						0. 15	35. 0	0. 18	·1362	1. 53	·03202	Min.	62 ·0	63 ·5
10. 8	29. 55	13. 30	·1382						0. 29	34. 25	0. 29	·1359	2. 32	·03218	1. 0	62 ·6	64 ·5
10. 15	29. 50	13. 59	·1375						0. 42	34. 45	0. 40	·1361	2. 53	·03236	2. 0	62 ·7	64 ·7
10. 42	30. 35	14. 14	·1376						1. 8	36. 20	0. 48	·1358	3. 48	·03253	3. 0	63 ·1	65 ·3
11. 1	29. 20	14. 40	·1370						1. 26	35. 5	1. 5	·1365	4. 19	·03278	9. 0	64 ·4	66 ·8
11. 39	27. 5	15. 10	·1363						1. 39	35. 50	1. 19	·1359	4. 53	·03276	Max.	64 ·7	67 ·0
12. 4	29. 55	15. 33	·1366						1. 46	35. 25	1. 34	·1366	5. 1	·03289	21. 0	63 ·6	64 ·5
12. 30	24. 50	15. 56	·1363						1. 59	36. 30	1. 48	·1362		***	22. 0	63 ·6	64 ·5
12. 40	24. 50	16. 29	·1366						2. 9	36. 10	2. 5	·1368	5. 30	·03284	23. 0	63 ·7	64 ·9
12. 44	25. 35	16. 45	·1364						2. 26	36. 25	2. 27	·1359	5. 50	·03308			
12. 53	25. 25	17. 18	·1369						2. 42	35. 30	2. 44	·1354	6. 0	·03301			
13. 7	26. 30	17. 26	·1367						2. 47	35. 40	3. 3	·1366	6. 46	·03318			
13. 32	27. 0	17. 46	·1369						2. 56	34. 55	3. 23	·1367	7. 0	·03309			
13. 40	26. 20	18. 9	·1367						3. 11	34. 20	3. 32	·1385	7. 11	·03315			
13. 55	25. 20	19. 7	·1360						3. 24	35. 0	3. 49	·1380	7. 16	·03310			
14. 13	25. 20	19. 19	·1363						3. 35	34. 45	3. 59	·1382	7. 32	·03322			
14. 40	23. 20	19. 35	·1353						3. 41	33. 30	4. 14	·1374	7. 56	·03316			
15. 7	24. 30		***						3. 54	33. 45	4. 20	·1374	8. 16	·03318			
15. 26	25. 55	19. 59	·1358						4. 8	33. 0	4. 36	·1382	9. 58	·03278			
15. 41	28. 0		***						4. 12	33. 0	5. 4	·1381	11. 2	·03291			
16. 6	26. 0	20. 32	·1354						4. 36	34. 30	5. 15	·1398	11. 25	·03269			
16. 27	25. 30	21. 25	·1357						4. 44	33. 40	5. 24	·1392	11. 42	·03264			
16. 39	24. 55	21. 38	·1362						4. 57	33. 25	5. 35	·1394	12. 11	·03283			
16. 43	24. 55	22. 24	·1357						5. 7	34. 30	5. 43	·1378	13. 42	·03291			
16. 48	25. 35	22. 44	·1362						5. 31	30. 55	5. 46	·1381	14. 24	·03282			
16. 57	25. 45	23. 48	·1356						5. 43	31. 10	5. 58	·1383	15. 2	·03285			
17. 24	25. 25	23. 59	·1358						6. 1	31. 10	6. 12	·1372	15. 38	·03281			
17. 45	26. 30								6. 21	32. 40	6. 18	·1374	15. 56	·03291			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 21		June 21		June 21				
h m	° ′ ″	h m		h m		h m	°	°
6. 37	20. 32. 20	6. 26	·1370	16. 40	·03277			
6. 41	31. 5	6. 38	·1374	17. 3	·03266			
6. 58	33. 30	6. 47	·1372	17. 24	·03266			
7. 9	33. 0	7. 8	·1361	17. 48	·03271			
7. 13	33. 35	7. 13	·1364	18. 12	·03265			
7. 23	28. 50	7. 22	·1363	19. 12	·03279			
7. 29	26. 45	7. 36	·1379		***			
7. 41	28. 30	8. 3	·1374	20. 41	·03268			
7. 52	28. 30	8. 20	·1381	23. 59	·03262			
7. 57	29. 10	8. 41	·1368					
8. 5	28. 30	9. 10	·1373					
8. 16	28. 55	9. 19	·1368					
8. 23	30. 15	9. 27	·1372					
8. 28	30. 15	9. 33	·1369					
8. 58	28. 0	9. 49	·1376					
9. 5	28. 35	9. 54	·1379					
9. 11	30. 0	10. 11	·1366					
9. 16	29. 50	10. 19	·1372					
9. 26	30. 25	10. 39	·1362					
9. 31	29. 5	11. 11	·1378					
9. 36	28. 0	11. 52	·1352					
9. 47	24. 25	12. 23	·1359					
9. 56	24. 25	12. 52	·1357					
10. 9	20. 55	13. 3	·1360					
10. 24	24. 55	13. 41	·1363					
10. 31	25. 25	13. 54	·1360					
10. 35	25. 5	14. 19	·1365					
10. 38	26. 5	14. 44	·1360					
10. 41	26. 50	15. 11	·1364					
10. 54	26. 5	15. 51	·1354					
11. 2	27. 20	16. 17	·1353					
11. 10	27. 40	16. 43	·1356					
11. 17	25. 35	17. 34	·1344					
11. 26	24. 55	17. 38	·1348					
11. 34	25. 35	17. 42	·1345					
11. 41	23. 50	17. 48	·1353					
11. 49	23. 10	18. 3	·1351					
12. 6	26. 5	18. 8	·1353					
12. 26	27. 25	18. 18	·1350					
12. 34	29. 55	18. 28	·1352					
12. 44	31. 30	19. 12	·1345					
13. 24	29. 5	19. 22	·1348					
13. 34	32. 20	20. 12	·1336					
13. 41	32. 5	20. 18	·1339					
13. 42	34. 0	20. 44	·1324					
13. 50	34. 45	20. 59	·1335					
14. 25	30. 45	21. 30	·1338					
14. 52	29. 5	21. 54	·1332					
14. 56	29. 40	22. 23	·1324					
15. 6	29. 40	23. 23	·1351					
15. 11	28. 35		***					
15. 27	29. 20	23. 39	·1347					
15. 44	28. 0	23. 59	·1358					
16. 6	31. 20							
	***							
16. 35	33. 5							
16. 42	34. 30							
16. 56	34. 25							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 21								
h m	° ′ ″	h m		h m		h m	°	°
17. 12	20. 31. 40							
17. 26	30. 45							
17. 36	28. 40							
17. 47	29. 25							
17. 53	31. 20							
17. 57	29. 35							
18. 11	28. 35							
18. 15	27. 10							
18. 46	27. 10							
18. 56	26. 5							
19. 2	26. 45							
19. 5	25. 50							
19. 9	27. 10							
19. 11	26. 5							
19. 24	26. 55							
19. 29	26. 15							
19. 42	28. 40							
19. 49	27. 55							
19. 56	29. 10							
20. 9	29. 20							
20. 31	30. 10							
20. 46	29. 25							
20. 59	32. 5							
21. 11	30. 30							
22. 2	32. 5							
22. 11	31. 0							
22. 18	31. 25							
22. 26	30. 20							
22. 39	31. 5							
22. 41	31. 0							
22. 55	33. 30							
23. 7	33. 30							
23. 28	34. 35							
23. 38	34. 5							
23. 42	33. 30							
23. 56	33. 30							
23. 59	34. 5							
June 22		June 22		June 22		June 22		
0. 0	20. 34. 5	0. 0	·1358	0. 0	·03262	0. 0	64·3	65·2
0. 42	34. 30	0. 17	·1359	1. 45	·03298	1. 0	64·5	65·5
1. 9	36. 5	0. 35	·1360	4. 29	·03333	3. 0	64·7	66·0
1. 44	37. 30	0. 48	·1357	5. 34	·03359	Max.	65·4	66·9
2. 0	38. 25	1. 12	·1361	7. 17	·03365	9. 0	64·6	66·0
2. 14	37. 20	1. 25	·1356	7. 55	·03380	Min.	63·7	64·7
2. 23	36. 0	1. 30	·1357	8. 26	·03374	21. 0	64·0	65·0
3. 2	33. 30	2. 10	·1347	8. 43	·03379			
3. 55	33. 5	2. 16	·1351	14. 10	·03342			
4. 0	33. 35	2. 22	·1346	15. 28	·03336			
4. 26	32. 55	2. 43	·1361	15. 58	·03318			
4. 39	33. 30		***	17. 2	·03323			
4. 56	32. 0	3. 33	·1374	17. 23	·03316			
6. 15	31. 35	3. 40	·1369	22. 47	·03298			
6. 53	30. 40	3. 55	·1369	23. 59	·03309			
7. 2	30. 40	4. 14	·1376					
7. 12	28. 35	4. 26	·1365					
7. 23	28. 35	4. 44	·1370					
7. 28	28. 20	4. 58	·1365					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
June22		June22						
h m	° ′ ″	h m		h m		h m	°	°
7. 42	20. 28. 55	5. 19	·1362					
7. 49	29. 10	5. 28	·1364					
8. 0	28. 5	5. 48	·1363					
8. 11	26. 25	6. 39	·1376					
8. 18	23. 5	7. 12	·1360					
8. 27	23. 40	7. 20	·1366					
8. 34	25. 30	7. 27	·1365					
8. 56	25. 5	7. 41	·1373					
9. 4	25. 50	8. 7	·1366					
9. 15	25. 35	8. 17	·1356					
9. 39	26. 40	8. 34	·1368					
9. 56	28. 40	8. 52	·1364					
10. 10	27. 55	9. 14	·1367					
10. 41	29. 5	9. 40	·1360					
10. 45	29. 50	9. 52	·1363					
11. 11	28. 35	10. 10	·1358					
11. 44	29. 10	10. 48	·1361					
13. 25	29. 35	11. 2	·1357					
13. 31	30. 15		***					
14. 11	28. 50	12. 16	·1364					
14. 30	31. 20	12. 58	·1362					
14. 48	30. 5	13. 18	·1365					
15. 10	29. 25	14. 9	·1357					
15. 17	28. 30	14. 16	·1363					
15. 33:	30. 10	14. 24	·1360					
15. 45	28. 35	14. 30	·1363					
15. 50	28. 35	14. 58	·1361					
16. 9	26. 55	15. 48	·1372					
16. 41	25. 20	16. 14	·1362					
16. 54	25. 50	16. 55	·1357					
17. 3	25. 25	17. 2	·1362					
17. 9	26. 30	17. 7	·1356					
17. 37	24. 30	17. 24	·1353					
17. 52	26. 10	17. 32	·1356					
17. 57	26. 10	17. 38	·1353					
18. 11	26. 40	18. 4	·1357					
18. 32	26. 45	18. 34	·1350					
18. 43	28. 5	18. 49	·1349					
18. 59	28. 35	18. 58	·1352					
19. 12	27. 30		***					
19. 26	28. 10	19. 49	·1342					
	***	20. 0	·1344					
19. 48	25. 30		***					
20. 2	27. 25	21. 7	·1336					
20. 6	27. 0	21. 30	·1340					
20. 15	28. 20	21. 49	·1336					
20. 27	27. 55	22. 24	·1344					
20. 38	29. 0	22. 43	·1339					
20. 41	28. 30		***					
20. 45	29. 45	23. 36	·1350					
20. 58	29 0	23. 59	·1356					
21. 9	29. 55							
21. 12	26. 0							
21. 26	30. 10							
21. 32	29. 30							
21. 56	31. 50							
22. 8	31. 10							
22. 13	32. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
June22								
h m	° ′ ″	h m		h m		h m	°	°
22. 25	20. 31. 30							
22. 31	32. 40							
22. 42	32. 25							
22. 59	33. 30							
23. 23	33. 50							
23. 39	33. 10							
23. 47	34. 5							
23. 59	33. 55							
June23		June23		June23		June23		
0. 0	20. 33. 55	0. 0	·1356	0. 0	·03309	Min.	64 ·5	65 ·8
0. 10	34. 30	0. 51	·1365	2. 38	·03341	1. 0	64 ·7	66 ·1
0. 13	35. 25	1. 42	·1358	4. 23	·03374	3. 0	65 ·3	67 ·0
0. 23	34. 0	2. 34	·1366	5. 38	·03382	9. 0	65 ·6	67 ·0
1. 35	36. 20	2. 58	·1375	6. 33	·03368	Max.	66 ·1	67 ·5
1. 43	35. 40	3. 15	·1365	7. 14	·03376	21. 0	65 ·4	66 ·5
1. 52	36. 0	3. 43	·1365	8. 33	·03388			
2. 55	35. 0	4. 10	·1361	12. 59	·03369			
3. 4	34. 10	4. 18	·1366	13. 38	·03336			
3. 23	34. 0	4. 55	·1358	15. 28	·03337			
3. 41	33. 5	5. 41	·1365	15. 56	·03324			
3. 55	31. 55	5. 47	·1371	16. 42	·03347			
4. 4	31. 30	6. 52	·1364	17. 42	·03343			
4. 11	30. 0	7. 11	·1372	19. 1	·03354			
4. 26	30. 40	7. 22	·1373	20. 1	·03351			
4. 55	30. 40	7. 39	·1363	22. 33	·03329			
5. 9	30. 20	7. 44	·1372	23. 59	·03333			
5. 33	30. 35	7. 57	·1366					
5. 41	31. 30	8. 35	·1369					
5. 46	30. 50	8. 49	·1363					
6. 8	31. 20	9. 14	·1367					
6. 30	31. 20	10. 6	·1366					
6. 43	30. 35	10. 15	·1362					
7. 4	30. 55	10. 22	·1366					
7. 12	30. 40	10. 34	·1362					
7. 40	31. 35	10. 44	·1365					
8. 0	30. 30	10. 46	·1362					
8. 33	29. 40	10. 58	·1362					
8. 42	30. 20	11. 17	·1365					
9. 0	29. 35	11. 41	·1364					
9. 11	29. 35	11. 44	·1367					
9. 33	27. 55	12. 12	·1363					
9. 44	26. 5	12. 23	·1367					
9. 58	26. 35	12. 31	·1364					
10. 17	26. 35	12. 47	·1364					
10. 29	28. 5	13. 0	·1372					
10. 38	28. 5	13. 10	·1368					
10. 42	28. 25	13. 13	·1371					
10. 53	27. 30	13. 41	·1366					
11. 0	27. 20	13. 58	·1367					
11. 28	28. 35	14. 37	·1364					
11. 43	28. 35	15. 36	·1370					
11. 52	29. 5	16. 24	·1352					
11. 59	28. 20	16. 48	·1354					
12. 4	28. 40	17. 10	·1352					
12. 11	27. 50	17. 22	·1354					
12. 51	32. 45	18. 3	·1345					
13. 2	36. 5	18. 35	·1347					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 23		June 23						
h m	° ′ ″	h m		h m		h m	°	°
13. 8	20. 34. 30	19. 7	·1344					
13. 13	35. 55	19. 49	·1348					
13. 38	32. 50	20. 22	·1345					
13. 43	31. 45	21. 22	·1346					
13. 56	31. 55	21. 55	·1342					
14. 8	29. 50	22. 24	·1339					
14. 23	29. 50	22. 35	·1341					
14. 38	31. 0	22. 54	·1336					
14. 54	32. 45	23. 14	·1345					
15. 9	33. 5	23. 34	·1345					
15. 25	34. 40	23. 39	·1340					
15. 33	32. 55	23. 59	·1343					
15. 40	33. 0							
15. 51	30. 35							
16. 1	28. 30							
16. 11	27. 40							
16. 22	28. 15							
16. 25	27. 40							
16. 33	28. 30							
16. 41	28. 10							
16. 53	29. 40							
17. 1	28. 35							
17. 8	27. 55							
17. 12	28. 20							
17. 23	27. 5							
17. 42	25. 30							
17. 53	26. 45							
18. 2	24. 55							
19. 4	23. 15							
19. 13	23. 30							
19. 37	23. 0							
19. 46	24. 5							
20. 17	23. 25							
20. 41	23. 35							
20. 57	23. 50							
21. 43	27. 55							
21. 55	27. 55							
22. 9	29. 20							
22. 42	31. 35							
23. 26	34. 50							
	***							
23. 56	37. 25							
23. 59	37. 25							
June 24		June 24		June 24		June 24		
0. 0	20. 37. 25	0. 0	·1343	0. 0	·03333	1. 0	65·7	66·7
0. 28	37. 35	0. 24	·1351	2. 11	·03368	3. 0	65·6	66·5
0. 40	38. 25	1. 14	·1363	3. 56	·03360	Max.	66·2	67·2
1. 10	38. 10	1. 22	·1360	6. 7	·03387	9. 0	65·6	66·7
1. 23	37. 30	1. 31	·1364	6. 48	·03371	Min.	63·8	65·1
1. 39	36. 55	1. 36	·1361	7. 23	·03378	22. 0	65·2	65·1
1. 55	38. 0	2. 14	·1377	14. 7	·03338			
2. 6	37. 30	2. 22	·1374	14. 47	·03345			
2. 26	37. 30	2. 26	·1378	18. 43	·03327			
2. 39	36. 50	2. 40	·1370	19. 13	·03310			
2. 42	37. 30	2. 43	·1379	21. 59	·03310 ·03188			
2. 56	36. 25	3. 2	·1372					
3. 9	36. 25	3. 34	·1374	23. 59	·03181			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 24		June 24						
h m	° ′ ″	h m		h m			°	°
3. 36	20. 35. 30	4. 4	·1367					
3. 39	36. 10	4. 38	·1370					
3. 42	34. 30	4. 51	·1379					
3. 53	34. 30	4. 56	·1376					
4. 23	33. 25	5. 14	·1382					
4. 39	32. 55	5. 20	·1372					
4. 45	33. 25	5. 29	·1363					
4. 53	32. 35	5. 49	·1373					
5. 9	32. 35	6. 3	·1368					
	***	6. 12	·1372					
5. 41	30. 0	6. 37	·1367					
5. 54	30. 30	6. 46	·1370					
6. 1	30. 20	6. 56	·1379					
6. 29	31. 30	7. 18	·1368					
6. 43	30. 55	7. 40	·1367					
7. 10	31. 10	8. 2	·1373					
7. 21	30. 35	8. 12	·1371					
7. 30	31. 0	8. 32	·1376					
8. 11	29. 35	9. 13	·1382					
8. 26	27. 45	9. 29	·1374					
8. 39	27. 30	9. 49	·1379					
8. 44	28. 25	10. 25	·1371					
8. 53	28. 0	11. 5	·1370					
9. 23	28. 40	11. 14	·1366					
9. 33	28. 30	11. 19	·1370					
9. 56	29. 5	11. 34	·1366					
10. 14	27. 20	11. 41	·1369					
10. 28	27. 40	11. 52	·1367					
10. 42	28. 30	12. 50	·1372					
11. 8	28. 50	13. 10	·1365					
11. 26	28. 30	13. 25	·1369					
	***	13. 59	·1365					
12. 26	30. 0	14. 42	·1368					
12. 53	29. 15	15. 34	·1362					
13. 18	29. 15	16. 27	·1370					
13. 26	30. 5		***					
13. 43	29. 35	17. 3	·1363					
13. 57	27. 30		***					
14. 39	31. 35	17. 49	·1362					
14. 56	31. 45	18. 23	·1352					
15. 6	31. 0	18. 48	·1360					
15. 11	31. 0		***					
15. 23	30. 30	19. 20	·1356					
15. 37	30. 30	20. 4	·1357					
15. 53	31. 10	20. 14	·1354					
16. 32	28. 5		***					
16. 41	27. 40	21. 40	·1356					
	***	22. 33	·1348					
17. 13	28. 20	22. 41	·1350					
17. 24	27. 25	22. 53	·1344					
17. 39	29. 25	23. 20	·1350					
17. 44	28. 55	23. 29	·1352					
17. 56	29. 25	23. 43	·1354					
17. 58	28. 40	23. 59	·1350					
18. 6	30. 0							
18. 11	29. 25							
18. 19	30. 20							
18. 27	29. 35							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 24								
h m	° ′ ″	h m		h m		h m	°	°
18. 39	20. 29. 50							
18. 56	31. 30							
19. 19	27. 35							
19. 38	27. 35							
19. 59	26. 30							
20. 11	26. 30							
20. 15	25. 45							
20. 41	26. 40							
21. 8	26. 30							
22. 5	28. 10							
22. 31	31. 20							
22. 46	33. 25							
22. 56	33. 15							
23. 11	34. 10							
23. 26	34. 50							
23. 59	37. 35							
June 25		June 25		June 25		June 25		
0. 0	20. 37. 35	0. 0	·1350	0. 0	·03181	1. 0	64 ·6	66 ·3
0. 41	39. 30	0. 18	·1347	4. 24	·03223	Max.	65 ·5	66 ·6
1. 8	39. 30		***	5. 3	·03218	9. 0	65 ·5	66 ·3
1. 12	39. 5	1. 49	·1366	5. 30	·03227	Min.	63 ·8	64 ·7
1. 16	39. 35		***	6. 25	·03226	21. 0	63 ·8	65 ·1
1. 20	38. 50	2. 46	·1367	7. 39	·03231			
1. 27	39. 35	3. 41	·1376	12. 0	·03214			
2. 41	38. 5	3. 45	·1373	13. 6	·03207			
2. 56	37. 25	3. 52	·1379	13. 18	·03210			
3. 12	37. 10	4. 17	·1368	13. 55	·03189			
3. 26	38. 0	4. 33	·1373	15. 24	·03185			
3. 39	37. 30	4. 42	·1372	16. 10	·03193			
4. 1	37. 5	4. 52	·1366	23. 59	·03162			
4. 14	36. 25	5. 5	·1372					
4. 28	36. 20	5. 16	·1365					
4. 38	36. 35	5. 27	·1364					
5. 27	35. 0	5. 41	·1372					
6. 42	33. 55	6. 13	·1363					
6. 57	34. 5	6. 25	·1366					
7. 29	31. 35	6. 48	·1361					
7. 58	32. 45	7. 8	·1366					
8. 9	32. 25	7. 14	·1364					
8. 23	32. 45	7. 55	·1375					
9. 7	31. 50	8. 8	·1373					
9. 21	32. 25	8. 14	·1377					
9. 44	32. 0	8. 56	·1368					
9. 56	31. 30	9. 17	·1372					
10. 22	31. 40	9. 45	·1373					
10. 38	31. 5	10. 4	·1368					
10. 53	31. 25	10. 40	·1371					
11. 41	31. 5	11. 52	·1366					
11. 57	30. 10	12. 19	·1373					
12. 9	30. 30	12. 39	·1366					
12. 18	31. 15	12. 49	·1367					
12. 41	31. 0	13. 5	·1364					
12. 58	30. 0	13. 23	·1371					
13. 14	30. 50	13. 47	·1372					
13. 22	33. 5	14. 0	·1368					
13. 37	34. 30	14. 9	·1371					
13. 55	32. 25	14. 16	·1368					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 25		June 25						
h m	° ′ ″	h m		h m		h m	°	°
14. 8	20. 32. 15	14. 22	·1371					
14. 16	33. 5	15. 0	·1368					
14. 26	31. 5	15. 13	·1370					
14. 40	30. 30	15. 41	·1363					
15. 1	30. 20	16. 17	·1367					
15. 23	31. 0	17. 7	·1364					
15. 39	29. 20	17. 45	·1366					
16. 8	30. 25	18. 38	·1359					
16. 27	29. 20	19. 18	·1360					
16. 45	29. 10	19. 36	·1356					
	***	19. 48	·1357					
17. 26	27. 5	20. 17	·1347					
17. 43	28. 25		***					
18. 7	26. 50	21. 48	·1342					
18. 36	27. 20	22. 4	·1331					
18. 41	26. 30	22. 18	·1341					
18. 53	28. 5	22. 49	·1340					
19. 26	28. 0	23. 13	·1345					
19. 38	28. 35	23. 32	·1341					
20. 6	27. 55	23. 46	·1346					
20. 12	28. 35		(†)					
20. 23	27. 55							
20. 31	28. 20							
20. 39	27. 25							
20. 53	28. 50							
21. 1	29. 55							
21. 8	29. 0							
21. 58	31. 25							
22. 9	30. 40							
22. 23	32. 5							
22. 54	36. 10							
23. 26	36. 55							
23. 59	38. 10							
June 26		June 26		June 26		June 26		
0. 0	20. 38. 10		(†)	0. 0	·03162	1. 0	65 ·3	65 ·5
0. 14	36. 20	1. 0	·1379*	1. 57	·03232	3. 0	64 ·8	65 ·7
0. 42	36. 15	1. 25	·1372	2. 23	·03226	Max.	66 ·1	67 ·2
1. 55	38. 5	1. 54	·1371	3. 39	·03263	9. 0	65 ·1	66 ·0
2. 9	39. 55	2. 4	·1366	9. 3	·03262	Min.	63 ·4	63 ·5
2. 29	39. 20	2. 18	·1385	10. 40	·03242	21. 0	64 ·2	65 ·1
2. 46	38. 0	2. 28	·1376	11. 6	·03192			
3. 7	33. 40	2. 47	·1350	11. 32	·03184			
3. 12	33. 10	3. 2	·1359	12. 7	·03209			
3. 54	34. 30	3. 18	·1379	13. 11	·03224			
4. 8	34. 45	3. 45	·1376	17. 46	·03225			
4. 23	33. 40	4. 12	·1381	18. 57	·03231			
4. 27	34. 25	4. 22	·1377	20. 8	·03213			
4. 54	33. 45	4. 34	·1385	20. 28	·03210			
4. 57	34. 40	4. 58	·1381	20. 59	·03205			
5. 29	32. 55	5. 22	·1371	22. 23	{·03203 ·03238			
5. 38	33. 45	6. 22	·1379					
5. 56	32. 45	6. 38	·1375	22. 38	{·03238 ·03208			
6. 6	33. 5	6. 42	·1378					
6. 27	32. 20	6. 44	·1376	22. 48	·03202			
6. 38	32. 45	6. 51	·1384	22. 57	·03230			
6. 43	32. 10	7. 11	·1374	23. 59	·03200			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 26		June 26						
h m	° ' ''	h m		h m		h m		
6. 55	20. 32. 30	7. 24	·1374					
7. 18	31. 20	7. 34	·1379					
7. 53	31. 45	7. 41	·1376					
8. 11	28. 20	7. 56	·1379					
8. 15	28. 20	8. 16	·1375					
8. 28	24. 30	8. 27	·1380					
8. 38	23. 0	8. 36	·1378					
9. 9	26. 30	8. 49	·1380					
9. 22	26. 15	9. 30	·1379					
9. 56	30. 20	9. 46	·1374					
10. 8	29. 50	10. 24	·1377					
10. 28	28. 5	10. 40	·1372					
10. 46	34. 30	11. 4	·1380					
10. 57	33. 25	11. 16	·1374					
11. 9	28. 30	11. 32	·1374					
11. 22	27. 30	11. 49	·1365					
11. 38	23. 40	12. 10	·1371					
11. 45	23. 20	12. 30	·1371					
12. 41	27. 5	12. 44	·1366					
13. 40	29. 25	13. 3	·1370					
14. 12	30. 0	13. 20	·1370					
14. 28	29. 40	13. 24	·1367					
14. 52	30. 35	13. 34	·1370					
14. 58	30. 20	14. 12	·1370					
15. 11	31. 5	14. 50	·1366					
15. 45	28. 20	14. 58	·1370					
16. 24	28. 25	15. 34	·1366					
16. 54	27. 0	16. 50	·1368					
16. 58	27. 30		***					
17. 24	25. 45	18. 39	·1364					
17. 40	26. 25	19. 5	·1366					
17. 44	25. 30	19. 45	·1360					
17. 56	26. 0	20. 13	·1354					
18. 3	24. 45	21. 48	·1344					
18. 17	25. 15	22. 21	·1345					
18. 26	24. 40	22. 45	·1337					
18. 36	27. 0	23. 2	·1343					
18. 53	27. 45	23. 11	·1339					
19. 1	27. 0	23. 16	·1344					
19. 9	24. 20	23. 37	·1337					
19. 16	26. 40	23. 59	·1343					
19. 26	27. 10							
19. 37	24. 55							
19. 46	24. 55							
	***							
20. 9	23. 50							
20. 28	26. 50							
20. 42	27. 0							
20. 46	24. 40							
20. 56	30. 30							
21. 13	28. 0							
21. 43	28. 30							
22. 11	31. 10							
22. 26	31. 50							
22. 39	33. 0							
22. 48	34. 30							
23. 8	36. 20							
23. 12	36. 10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 26								
h m	° ' ''	h m		h m				
23. 48	20. 38. 0							
23. 59	38. 0							
June 27		June 27		June 27		June 27		
0. 0	20. 38. 0	0. 0	·1343	0. 0	·03200	1. 0	65 ·1	66 ·0
0. 18	38. 35	0. 23	·1352	0. 30	·03206	3. 0	65 ·6	66 ·9
0. 24	38. 25	0. 31	·1350	4. 4	·03277	Max.	65 ·7	67 ·0
0. 35	38. 25	0. 44	·1358	8. 52	·03256	9. 0	64 ·6	66 ·0
0. 41	39. 40	1. 14	·1358	11. 24	·03232	Min.	63 ·0	63 ·7
1. 32	38. 0	1. 24	·1364	13. 48	·03220	21. 0	63 ·7	65 ·1
1. 42	36. 55	1. 49	·1357	17. 9	·03202	22. 30	63 ·8	65 ·1
1. 58	37. 45	2. 9	·1368	19. 18	·03155	23. 0	63 ·8	65 ·1
2. 16	37. 15	2. 38	·1372	20. 26	·03162			
3. 8	36. 50	2. 52	·1369	22. 44	·03157			
3. 26	36. 0	2. 58	·1373	23. 3	·03167			
3. 41	35. 30	3. 21	·1366	23. 32	·03156			
4. 5	35. 30	3. 34	·1368	23. 59	·03167			
4. 36	34. 10	3. 45	·1365					
5. 14	33. 45	4. 2	·1367					
5. 24	33. 15	4. 12	·1366					
5. 42	33. 50	4. 24	·1371					
5. 54	33. 0	4. 40	·1369					
6. 7	33. 0	4. 50	·1374					
6. 26	32. 25	4. 58	·1366					
6. 43	32. 25	5. 17	·1371					
7. 11	33. 30	5. 28	·1368					
7. 24	33. 10	5. 40	·1371					
7. 32	33. 45	5. 49	·1377					
7. 39	33. 20	6. 4	·1375					
7. 43	33. 45	6. 13	·1377					
7. 54	32. 50	6. 42	·1374					
8. 53	31. 10	6. 57	·1377					
8. 59	30. 30	7. 36	·1374					
9. 16	31. 20	8. 10	·1380					
9. 56	31. 20	8. 50	·1374					
10. 24	29. 30	9. 25	·1378					
10. 42	30. 30	9. 55	·1374					
11. 3	29. 30	10. 19	·1381					
11. 23	32. 30	10. 56	·1373					
11. 30	31. 15	11. 17	·1383					
11. 43	30. 10	11. 35	·1374					
12. 9	30. 35	11. 54	·1368					
12. 17	30. 10	12. 6	·1369					
12. 52	29. 30	12. 45	·1366					
13. 0	30. 20	13. 2	·1369					
13. 24	29. 35	13. 14	·1367					
14. 26	29. 50	16. 19	·1373					
14. 38	29. 25	17. 23	·1374					
14. 56	29. 25	18. 26	·1354					
15. 27	30. 30	19. 5	·1378					
15. 39	30. 30	19. 23	·1375					
15. 58	29. 25	19. 26	·1379					
16. 8	29. 25	20. 4	·1374					
16. 23	28. 0	20. 24	·1370					
16. 54	29. 5	20. 41	·1359					
	***	20. 52	·1360					
17. 22	29. 30	22. 20	·1343					
17. 38	29. 30	22. 27	·1352					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 27		June 27						
h m	° ′ ″	h m				h m	°	°
17. 52	20. 32. 20	22. 52	·1345					
18. 12	35. 30	23. 29	·1349					
18. 26	35. 30	23. 33	·1340					
18. 42	36. 50	23. 53	·1342					
19. 35	31. 50	23. 59	·1343					
20. 14	30. 0							
20. 26	30. 0							
20. 33	28. 50							
20. 44	28. 50							
20. 56	29. 30							
22. 8	29. 30							
22. 12	29. 50							
22. 16	29. 25							
22. 26	31. 5							
22. 58	32. 45							
23. 39	36. 30							
23. 43	36. 10							
23. 59	37. 0							
June 28		June 28		June 28		June 28		
0. 0	20. 37. 0	0. 0	·1343	0. 0	·03167	0. 0	64·6	65·1
0. 26	37. 45	0. 33	·1341	5. 11	·03242	1. 0	64·8	65·4
0. 55	37. 0	0. 42	·1346	5. 34	·03236	3. 0	64·9	65·8
1. 8	39. 10	0. 52	·1341	6. 2	·03243	Max.	64·9	66·7
1. 26	38. 25	1. 8	·1358	6. 26	·03238	9. 0	64·6	66·7
1. 45	38. 50	1. 41	·1345	7. 45	·03249	Min.	63·0	64·1
2. 8	37. 10	2. 19	·1359	9. 0	·03231	21. 0	63·8	65·4
2. 34	36. 40	3. 35	·1368	11. 11	·03228	22. 0	63·6	64·9
2. 39	35. 30	3. 41	·1375	12. 28	·03205	23. 0	63·6	64·9
3. 8	34. 35	3. 52	·1372	13. 9	·03196			
4. 22	35. 10	3. 55	·1381	13. 30	·03176			
5. 11	34. 35	4. 4	·1375	14. 9	·03174			
5. 33	34. 55	4. 17	·1381	14. 48:	·03168			
5. 45	34. 5	4. 32	·1373	15. 44	·03192			
6. 3	33. 40	4. 38	·1376	18. 42	·03209			
6. 17	34. 10		***	19. 54	·03197			
6. 41	32. 30	4. 56	·1364	23. 59	·03184			
6. 56	32. 30	5. 11	·1372					
7. 44	30. 25	5. 19	·1368					
7. 58	30. 5	5. 48	·1368					
8. 22	30. 30	6. 15	·1380					
8. 32	30. 15	6. 26	·1376					
8. 53	30. 30	6. 35	·1372					
10. 8	30. 0	7. 3	·1366					
10. 41	24. 30	7. 13	·1369					
10. 52	25. 10	7. 19	·1366					
11. 5	25. 0	7. 52	·1378					
11. 28	30. 0	8. 20	·1377					
11. 46	30. 10	8. 24	·1379					
12. 51	27. 0	8. 42	·1374					
12. 56	27. 0	8. 56	·1377					
13. 23	29. 10	9. 21	·1375					
13. 38	26. 50	9. 39	·1388					
13. 58	30. 5	10. 29	·1381					
14. 23	31. 0	10. 52	·1392					
14. 39	29. 5	11. 19	·1384					
14. 53	28. 30	11. 54	·1383					
15. 2	29. 30	12. 22	·1390					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 28		June 28						
h m	° ′ ″	h m		h m		h m	°	°
15. 26	20. 29. 20	13. 4	·1383					
15. 53	29. 30	13. 20	·1388					
15. 59	28. 35	13. 58	·1376					
16. 43	25. 50	14. 24	·1386					
16. 59	25. 30	14. 56	·1381					
17. 9	26. 10	15. 18	·1372					
17. 13	25. 30	16. 29	·1376					
17. 23	26. 35	19. 4	·1375					
17. 46	26. 0	19. 19	·1374					
18. 22	27. 30	20. 20	·1363					
18. 58	26. 35	21. 20	·1369					
19. 9	26. 5	21. 53	·1365					
19. 26	25. 40	23. 59	·1366					
19. 40	25. 40							
19. 58	26. 30							
20. 38	26. 30							
21. 40	28. 35							
22. 11	29. 5							
22. 15	29. 0							
22. 43	31. 20							
23. 26	34. 20							
23. 59	35. 45							
June 29		June 29		June 29		June 29		
0. 0	20. 35. 45	0. 0	·1366	0. 0	·03184	0. 0	64·1	66·0
0. 9	36. 0	0. 56	·1371	3. 23	·03225	Max.	64·8	66·0
0. 53	36. 45	1. 31	·1384	4. 46	·03220	1. 0	64·8	65·7
1. 9	36. 5	2. 0	·1387	6. 39	·03216	2. 30	64·0	65·1
1. 30	35. 25	2. 22	·1385	6. 58	·03218	3. 0	64·4	65·2
2. 3	34. 50	3. 28	·1392	13. 11	·03196	Min.	63·1	64·3
3. 8	35. 0	3. 53	·1390	14. 57	·03189	9. 0	63·7	65·0
3. 52	33. 0	4. 7	·1399	17. 3	·03201	21. 0	64·2	65·2
4. 11	33. 0	4. 22	·1399	19. 3	·03199			
4. 35	31. 40	4. 41	·1392	19. 18	·03214			
4. 59	32. 50	5. 6	·1398	19. 27	·03203			
5. 23	31. 55	5. 18	·1395	20. 30	·03203			
6. 32	31. 25	5. 51	·1401	21. 58	·03183			
6. 53	29. 55	6. 23	·1400	22. 23	·03182			
7. 4	30. 30	6. 32	·1403	22. 29	·03191			
7. 41	29. 55	6. 53	·1400	22. 35	·03178			
7. 58	30. 30	7. 6	·1405	23. 59	·03178			
8. 11	30. 5	7. 18	·1400					
8. 26	30. 30	7. 40	·1399					
8. 59	29. 50	7. 48	·1401					
9. 56	30. 55	8. 5	·1396					
10. 8	32. 0	8. 25	·1395					
10. 23	30. 30	9. 42	·1396					
10. 28	30. 30	9. 56	·1404					
10. 38	30. 50	10. 12	·1398					
10. 53	30. 25	12. 9	·1394					
10. 58	30. 25	16. 20	·1398					
11. 12	29. 40	18. 42	·1390					
11. 38	29. 30	19. 52	·1377					
11. 46	30. 10	20. 34	·1373					
12. 6	29. 50	20. 48	·1379					
12. 18	30. 30	21. 21	·1381					
12. 34	29. 40	21. 33	·1367					
14. 13	30. 0	22. 12	·1368					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 29		June 29						
h m	° ′ ″	h m		h m		h m	°	°
14. 29	20. 29. 35	23. 4	·1372					
14. 46	29. 30	23. 21	·1368					
15. 24	30. 20	23. 48	·1372					
16. 12	28. 20		(†)					
16. 22	28. 30							
17. 11	25. 30							
17. 26	26. 25							
17. 42	25. 20							
17. 53	25. 20							
18. 4	26. 5							
18. 24	25. 10							
18. 40	25. 5							
18. 43	25. 35							
18. 53	25. 5							
19. 23	25. 0							
19. 39	25. 30							
20. 12	24. 15							
20. 36	26. 55							
20. 52	27. 5							
21. 9	27. 50							
21. 34	27. 25							
21. 58	27. 30							
22. 28	29. 5							
22. 53	30. 50							
23. 23	33. 0							
23. 59	34. 30							
June 30		June 30		June 30		June 30		
0. 0	20. 34. 30		(†)	0. 0	·03178	1. 0	64 ·7	66 ·4
0. 21	35. 0	0. 19	·1374	1. 7	·03200 ·03121	Max.	64 ·7	66 ·4
0. 27	35. 0	0. 45	·1379			3. 0	63 ·8	65 ·0
0. 42	36. 10	1. 0	·1377	2. 15	·03107	9. 0	63 ·6	64 ·7
0. 56	35. 55	1. 19	·1380	2. 49	·03119	Min.	62 ·2	62 ·7
1. 9	37. 10	1. 25	·1371	5. 10	·03142	21. 0	62 ·7	63 ·0
1. 23	37. 25	1. 30	·1374	6. 43	·03142			
1. 26	38. 35	1. 34	·1365	7. 25	·03133			
1. 32	38. 0	1. 40	·1368	16. 13	·03077			
1. 39	38. 35	1. 50	·1365	18. 25	·03056			
1. 44	38. 10	2. 30	·1373	21. 16	·03011			
2. 15	38. 20	2. 42	·1372	23. 59	·03010			
2. 43	37. 0	3. 20	·1377					
2. 59	37. 30	3. 35	·1380					
3. 16	37. 0	3. 42	·1375					
3. 31	37. 20	3. 49	·1377					
4. 29	34. 25	3. 59	·1374					
4. 40	34. 25	4. 18	·1380					
5. 9	33. 30	4. 33	·1376					
5. 24	33. 50	4. 43	·1380					
5. 28	33. 10	4. 52	·1378					
5. 44	32. 40	5. 4	·1380					
6. 46	32. 0	5. 12	·1378					
7. 14	32. 15	5. 24	·1382					
7. 56	30. 50	5. 32	·1377					
8. 13	30. 50	5. 39	·1380					
8. 32	30. 30	5. 45	·1377					
9. 9	30. 30	6. 39	·1377					
9. 29	29. 55	6. 51	·1379					
9. 46	30. 35	7. 44	·1379					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 30		June 30						
h m	° ′ ″	h m		h m		h m	°	°
10. 16	20. 29. 40	8. 14	·1383					
10. 51	29. 40	8. 30	·1380					
11. 13	30. 30	9. 9	·1380					
14. 24	30. 20	9. 49	·1382					
15. 13	29. 25	10. 0	·1381					
15. 28	29. 25	10. 34	·1383					
15. 38	29. 0	10. 42	·1380					
15. 53	29. 25	10. 52	·1383					
16. 11	28. 40	11. 2	·1381					
16. 37	28. 50	12. 4	·1382					
16. 58	27. 15	12. 14	·1380					
17. 9	28. 20	12. 41	·1381					
17. 53	28. 0	13. 6	·1379					
18. 7	27. 5	14. 20	·1382					
18. 14	27. 20	14. 46	·1381					
18. 26	25. 20	14. 54	·1384					
18. 44	25. 20	15. 25	·1383					
19. 10	24. 30	16. 16	·1386					
19. 22	23. 25	16. 34	·1381					
19. 31	24. 30	16. 51	·1380					
19. 40	26. 35		* * *					
20. 53	26. 35	19. 38	·1375					
20. 58	27. 30	20. 0	·1377					
21. 32	27. 50		* * *					
21. 39	28. 55	22. 44	·1363					
22. 14	31. 50	23. 59	·1374					
23. 59	36. 0							
July 1		July 1		July 1		July 1		
0. 0	20. 36. 0	0. 0	·1374	0. 0	·03010	1. 0	63· 6	63· 8
0. 11	36. 30	0. 27	·1376	1. 38	·03019	3. 0	63· 6	64· 2
1. 26	37. 0	1. 10	·1378	4. 53	·03072	Max.	63· 9	64· 5
1. 52	37. 15	1. 33	·1375	7. 9	·03072	9. 0	63· 3	64· 0
2. 11	37. 30	1. 40	·1380	12. 39	·03041	Min.	61· 8	62· 4
2. 32	36. 50	2. 4	·1378	16. 38	·03025	22. 35	63· 4	63· 9
2. 41	37. 10	2. 38	·1378	17. 15	·03031			
2. 55	36. 45	2. 46	·1382	18. 46	·03007			
3. 5	36. 45	2. 58	·1384	22. 37	·02991			
3. 11	36. 15	3. 47	·1377	23. 59	·02997			
3. 25	36. 15	4. 3	·1381					
3. 41	35. 25	4. 13	·1378					
3. 58	35. 25	5. 12	·1383					
4. 11	34. 50	5. 42	·1379					
4. 26	34. 40	6. 4	·1381					
6. 17	31. 50	6. 36	·1378					
6. 55	31. 30	7. 0	·1382					
7. 2	32. 5	7. 9	·1385					
7. 11	31. 30	7. 19	·1383					
7. 35	32. 0	7. 35	·1385					
10. 39	31. 10	8. 15	·1383					
10. 56	31. 35	8. 35	·1385					
11. 11	30. 30	10. 33	·1383					
11. 57	30. 30	11. 15	·1386					
14. 56	29. 30	12. 36	·1380					
15. 24	29. 30	16. 4	·1383					
16. 44	27. 0	18. 19	·1379					
17. 53	26. 0	21. 39	·1363					
17. 57	26. 35	21. 54	·1359					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 1		July 1						
h m	° ′ ″	h m		h m		h m	°	°
18.22	20.25.50	22.10	·1361					
19. 2	27. 0	22.30	·1360					
19.26	26. 0	23. 4	·1367					
19.33	26.35	23.59	·1371					
20.26	26.10							
20.40	25.50							
21. 7	26.35							
21.23	26.55							
21.53	28.50							
22.17	31.30							
22.33	31.30							
23.59	35. 0							
July 2		July 2		July 2		July 2		
0. 0	20.35. 0	0. 0	·1371	0. 0	·02997	1. 0	63·8	64·5
0.59	36.35	0.39	·1374	2.30	·03031	Max.	64·7	65·8
2. 3	36.15	1.38	·1369	4.41	·03057	9. 0	64·3	65·1
2.15	35.55	2. 6	·1374	6.50	·03068	Min.	62·4	63·2
2.29	36. 5	2.18	·1373	10.30	·03072	21. 0	63·9	64·8
3.28	34. 5	2.36	·1376	11. 5	·03063			
3.39	34.30	2.44	·1374	11.33	·03063			
4.11	33.30	3.27	·1373	15. 2	·03042			
4.37	33.30	3.45	·1378	17.52	·03017			
4.41	32.50	4.22	·1376	18.43	·03016			
5. 7	33.30	4.54	·1379	21.57	·03028			
5.12	32.50	5. 8	·1378	22.39	·03024			
6.12	31.50	5.21	·1383	23.59	·03016			
6.33	32. 5	5.59	·1379					
7.38	30.30	6.34	·1385					
7.45	31.25	6.52	·1382					
8. 8	31.35	7.20	·1386					
8.14	30.45	7.34	·1385					
8.41	31.20	7.43	·1379					
9.47	30.50	8. 4	·1384					
10.24	29.30	8.29	·1379					
10.38	29.45	10.15	·1375					
10.55	28. 0	10.29	·1385					
11. 8	28. 0	11.13	·1373					
11.40	29.30	11.51	·1378					
12.48	28.30	12.41	·1373					
13.11	29.35	14. 4	·1379					
13.56	30. 0	14.21	·1377					
14. 7	30.35	14.58	·1378					
14.22	29.50	15.18	·1382					
14.39	30.25	16. 4	·1379					
15. 1	29.45	16.38	·1384					
15.23	30.50	17.43	·1378					
15.44	29.35	20. 0	·1372					
15.57	30.50	21.24	·1363					
16.10	31.20	22.18	·1356					
16.14	32.10	23.28	·1357					
16.39	31. 5	23.59	·1364					
16.58	27. 0							
17.27	25.15							
17.34	25.25							
17.42	24.50							
18.21	25.35							
18.26	25. 5							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 2								
h m	° ′ ″	h m		h m		h m	°	°
18.35	20.25.30							
18.44	24.45							
19. 8	25.20							
19.23	25.50							
20.36	27.20							
20.41	27.10							
21.39	28.50							
21.43	28.50							
22.14	30.35							
23.12	32.50							
23.47	32.50							
23.57	33.55							
23.59	33.55							
July 3		July 3		July 3		July 3		
0. 0	20.33.55	0. 0	·1364	0. 0	·03016	1. 0	64·8	65 5
0.16	34.55	0.28	·1348	5.23	·03110	3. 0	64·6	66·0
1.54	33.45	0.56	·1366	6.37	·03111	Max.	65·5	66·7
2.38	35.10	1.45	·1374	7.48	·03119	9. 0	64·6	66·0
2.58	35.20	2.27⁏	·1369	10.14	·03121	Min.	63·4	64·7
3.45	33.40	2.57	·1376	13.16	·03084	21. 0	64·6	65·1
4. 2	33.40	3.22	·1370	14. 5	·03091			
4.17	32.45	3.46	·1370	18.23	·03076			
4.51	31.55	4. 7	·1376	20.59	·03076			
5.18	32. 5	4.19	·1375	22.33	·03064			
5.26	31.35	4.34	·1378	23.59	·03075			
6.25	31. 0	4.56	·1375					
7.11	30.30	6. 2	·1385					
7.27	31.30	6.43	·1380					
8.24	32.35	6.54	·1387					
8.41	31.35	7. 3	·1389					
9.22	32.25	7.20	·1382					
9.44	31.10	7.44	·1385					
9.54	31.20	7.53	·1378					
10. 1	30.35	8.18	·1382					
10. 9	31.10	10.28	·1376					
10.23	31.10	10.52	·1380					
10.35	29.45	11.43	·1378					
10.53	30.30	12.36	·1384					
11.14	31. 5	12.45	·1379					
11.39	29.25	13.20	·1374					
11.52	30. 5	15. 8	·1377					
11.58	29.25	18.24	·1371					
12.11	30.10	19.41	·1364					
12.26	28.25	20. 5	·1359					
12.42	30.10	21.52	·1358					
13.10	31.15	23.59	·1371					
13.27	30.20							
14. 1	30.20							
14.12	32.20							
15.48	28.30							
16. 2	29. 5							
16.26	27.55							
17. 7	27.30							
17.43	26. 0							
18. 5	26.25							
18.13	25.55							
18.39	26.25							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁏ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 3								
h m	° ′ ″	h m		h m		h m	°	°
18. 59	20. 26. 5							
19. 14	26. 45							
19. 33	26. 5							
20. 7	27. 30							
20. 41	28. 20							
20. 47	29. 5							
20. 56	28. 50							
21. 24	30. 5							
21. 29	29. 50							
21. 39	30. 30							
21. 55	30. 40							
22. 2	31. 35							
22. 13	31. 30							
23. 59	37. 15							
July 4		July 4		July 4		July 4		
0. 0	20. 37. 15	0. 0	·1371	0. 0	·03075	Min.	65·4	66·5
0. 11	38. 5	0. 15	·1376	0. 30	·03077	1. 0	65·7	67·0
2. 25	35. 30	1. 31	·1372	3. 1	·03141	3. 0	65·6	67·2
2. 58	35. 20	2. 27	·1374		·03293	Max.	66·5	68·2
3. 8	33. 0	3. 13	·1382	12. 33	·03317	9. 0	66·2	67·7
3. 56	31. 50	4. 2	·1373	13. 7	·03310	21. 0	66·5	67·0
4. 23	30. 10	4. 51	·1372	16. 39	·03309	22. 0	66·3	67·3
4. 41	29. 35	5. 11	·1376	18. 1	·03300	23. 0	66·4	67·4
6. 14	30. 30	5. 24	·1374	20. 53	·03275			
6. 54	30. 0	5. 54	·1376	21. 10	·03266			
8. 27	30. 0	6. 21	·1374	23. 59	·03280			
8. 46	30. 20	6. 48	·1381					
10. 8	29. 20	8. 42	·1380					
10. 55	30. 10	8. 52	·1383					
12. 12	29. 5	9. 54	·1378					
12. 26	29. 35	10. 4	·1380					
13. 23	28. 25	10. 12	·1378					
13. 39	28. 40	10. 22	·1380					
13. 55	28. 0	10. 30	·1378					
14. 15	28. 10	10. 58	·1381					
14. 54	27. 30	12. 24	·1379					
15. 23	28. 5	12. 49	·1382					
16. 55:	24. 10	13. 10	·1383					
17. 52	23. 5	14. 45:	·1376					
18. 21	23. 25	15. 56	·1379					
18. 35	22. 30	19. 53	·1366					
19. 2	22. 50	22. 30	·1371					
19. 40	23. 25	23. 59	·1382					
21. 14	26. 55							
21. 59	27. 30							
22. 44	29. 0							
22. 59	30. 5							
23. 28	30. 30							
23. 41	31. 5							
23. 59	31. 5							
July 5		July 5		July 5		July 5		
0. 0	20. 31. 5	0. 0	·1382	0. 0	·03280	0. 0	66·8	67·8
0. 56	32. 0	2. 9	·1389	6. 33	·03363	1. 0	67·0	68·2
1. 8	31. 45	4. 24	·1379	6. 42	·03360	2. 0	67·3	68·5
1. 57	32. 30	4. 33	·1382	11. 47	·03377	3. 0	67·6	68·8
3. 9	31. 50	4. 38	·1379	15. 16	·03365	Max.	67·6	69·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 5		July 5		July 5		July 5		
h m	° ′ ″	h m		h m		h m	°	°
3. 36	20. 31. 50	5. 16	·1377	16. 53	·03369	9. 0	67·4	68·7
4. 28	30. 35	5. 33	·1381	19. 46	·03351	Min.	66·5	67·6
4. 37	31. 5	5. 46	·1379	23. 59	·03350	21. 0	67·1	68·8
4. 41	30. 35	6. 34	·1383			22. 0	66·7	68·5
5. 9	30. 0	6. 44	·1379			23. 0	67·4	68·7
5. 38	30. 25	7. 11	·1383					
8. 3	30. 25	10. 15	·1381					
8. 23	30. 5	11. 4	·1376					
9. 39	30. 15	11. 43	·1375					
9. 56	29. 35	13. 24	·1379					
10. 22	29. 35	14. 4	·1375					
10. 38	28. 55	15. 19	·1379					
11. 0	28. 35	19. 36	·1371					
11. 9	28. 0	21. 0	·1365					
11. 23	28. 35	22. 22	·1371					
11. 31	28. 25	23. 11	·1376					
11. 45	29. 5	23. 24	·1375					
12. 17	28. 30	23. 59	·1380					
14. 8	27. 35							
14. 23	29. 15							
14. 44	27. 30							
15. 16	26. 25							
16. 22	25. 55							
17. 33	23. 50							
17. 39	24. 10							
17. 43	23. 50							
18. 41	24. 50							
19. 8	24. 25							
19. 12	25. 10							
19. 26	24. 40							
19. 43	24. 50							
19. 52	24. 10							
19. 59	25. 20							
20. 41	25. 30							
21. 27	26. 25							
22. 16	28. 30							
23. 7	30. 50							
23. 13	31. 35							
23. 59	32. 35							
July 6		July 6		July 6		July 6		
0. 0	20. 32. 35	0. 0	·1382	0. 0	·03350	0. 0	67·7	68·9
0. 24	33. 45	0. 50	·1392	5. 18	·03409	1. 0	67·7	70·0
0. 59	34. 5	1. 8	·1387	5. 57	·03422	3. 0	68·1	69·8
2. 8	36. 45	1. 25	·1385	6. 13	·03421	Max.	68·7	71·4
2. 28	34. 30	1. 34	·1391	8. 1	·03457	9. 0	68·3	69·4
2. 41	35. 30	1. 39	·1387	8. 16	·03448	Min.	66·8	68·0
2. 56	35. 30	2. 7	·1400	12. 18	·03420	21. 0	67·3	68·0
3. 22	33. 0	2. 10	·1407	12. 35	·03419			
3. 39	33. 45	2. 34	·1374	12. 57	·03422			
3. 43	33. 30	3. 4	·1395	13. 25	·03402			
3. 56	33. 55	3. 18	·1383	13. 37	·03397			
4. 7	33. 25	3. 31	·1380	13. 54	·03383			
4. 28	33. 40	4. 9	·1399	14. 2	·03372			
4. 39	32. 30	4. 18	·1394	14. 14	·03353			
4. 45	32. 45	4. 41	·1402	14. 41	·03359			
4. 56	31. 25	4. 50	·1385	15. 1	·03351			
5. 18	30. 50	4. 57	·1387	15. 11	·03330			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 6		July 6		July 6				
h m	° ′ ″	h m		h m		h m		
5. 27	20. 30. 0	5. 10	·1377	15. 24	·03311			
5. 44	31. 55	5. 25	·1381	16. 23	·03328			
6. 11	32. 35	5. 42	·1374	16. 39	·03322			
6. 23	31. 45	6. 3	·1400	17. 1	·03342			
6. 41	31. 45	6. 12	·1402	17. 39	·03334			
6. 53	30. 50	6. 26	·1393	18. 44	·03357			
7. 8	30. 50	6. 52	·1397	18. 58	·03349			
7. 23	32. 0	7. 4	·1395	20. 38	·03362			
7. 32	33. 20	7. 18	·1395	21. 4	·03351			
7. 56	29. 45	7. 49	·1377	22. 6	·03368			
8. 13	28. 30	7. 57	·1379	23. 59	·03364			
8. 26	28. 30	8. 8	·1393					
8. 38	27. 30	8. 24	·1373					
8. 56	28. 15	8. 40	·1370					
9. 11	27. 55	8. 49	·1384					
9. 23	28. 25	9. 8	·1379					
9. 42	27. 10	9. 19	·1383					
10. 0	28. 0	9. 31	·1382					
10. 38	27. 5	9. 41	·1383					
10. 56	27. 40	9. 52	·1376					
11. 8	27. 20	10. 18	·1377					
11. 12	28. 5	10. 26	·1381					
11. 24	27. 10	10. 41	·1376					
11. 37	27. 30	10. 50	·1378					
11. 43	26. 0	10. 56	·1377					
12. 8	26. 20	11. 16	·1385					
12. 14	27. 30	11. 25	·1377					
12. 25	27. 10	11. 36	·1379					
12. 38	24. 40	12. 4	·1374					
12. 59	28. 30	12. 26	·1378					
13. 22	25. 45	12. 43	·1373					
13. 42	26. 20	13. 12	·1388					
13. 53	24. 30	13. 27	·1385					
14. 8	24. 50	13. 44	·1389					
14. 13	23. 20	14. 4	·1378					
14. 38	23. 20	14. 11	·1382					
14. 52	30. 0	14. 24	·1374					
14. 58	30. 0	14. 28	·1377					
15. 30	16. 0	14. 39	·1378					
15. 53	12. 35	14. 52	·1364					
16. 1	12. 15	15. 6	·1377					
16. 10	12. 45	15. 12	·1373					
16. 16	15. 5	15. 22	·1376					
16. 23	15. 5	15. 34	·1374					
16. 37	18. 5	15. 46	·1370					
16. 42	17. 50	16. 4	·1356					
17. 14	24. 25	16. 22	·1348					
17. 26	24. 10	16. 28	·1348					
17. 38	25. 30	16. 39	·1342					
17. 59	23. 5	17. 12	·1354					
18. 11	24. 5	17. 19	·1353					
18. 24	22. 15	17. 41	·1360					
18. 27	24. 5	17. 48	·1363					
18. 39	24. 5	17. 59	·1361					
18. 42	26. 15	18. 14	·1365					
18. 51	26. 15	18. 24	·1361					
18. 56	23. 30	18. 31	·1364					
19. 6	22. 50	18. 50	·1365					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 6		July 6						
h m	° ′ ″	h m		h m		h m	°	°
19. 23	20. 25. 50	19. 10	·1355					
19. 43	26. 55	19. 24	·1353					
19. 56	29. 10	19. 50	·1333					
19. 59	28. 30	20. 29	·1357					
20. 12	29. 25	21. 24	·1346					
20. 23	29. 10	21. 49	·1345					
20. 32	32. 30	22. 15	·1357					
21. 0	29. 40	22. 51	·1356					
21. 26	31. 5	23. 0	·1360					
21. 56	34. 15	23. 59	·1362					
22. 41	34. 15							
22. 54	34. 5							
22. 59	34. 5							
23. 7	34. 30							
23. 26	34. 35							
	***							
23. 59	37. 0							
July 7		July 7		July 7		July 7		
0. 0	20. 37. 0	0. 0	·1362	0. 0	·03364	1. 0	67·7	68·9
0. 11	37. 55		***	0. 33	·03379	3. 0	67·6	68·6
0. 14	37. 0	0. 19	·1364	0. 56	·03381	Max.	68·3	69·2
0. 23	38. 10	0. 28	·1376	2. 24	·03428	9. 0	66·6	68·3
0. 26	37. 25	0. 50	·1367	4. 42	·03431	Min.	64·8	65·8
0. 31	38. 55	1. 2	·1368	5. 31	·03449	21. 0	65·5	66·8
0. 41	38. 35	1. 11	·1376	5. 54	·03451			
0. 57	38. 5	1. 19	·1362	6. 14	·03473			
1. 11	39. 0	1. 52	·1372	8. 6	·03431			
1. 26	36. 50	1. 55	·1370	9. 8	·03410			
1. 53	36. 0	2. 15	·1386	10. 10	·03302			
2. 9	37. 15	2. 27	·1386	11. 3	·03272			
2. 27	40. 5	2. 41	·1371	11. 23	·03287			
2. 56	39. 10		***	11. 44	·03271			
3. 26	37. 10	3. 19	·1366	12. 3	·03282			
3. 38	37. 0	3. 25	·1373	13. 18	·03272			
3. 49	35. 55	3. 45	·1363	13. 33	·03257			
4. 11	34. 45	3. 52	·1369	13. 54	·03264			
4. 19	35. 5	4. 13	·1364	14. 26	·03243			
4. 24	34. 35	4. 39	·1386	14. 45	·03248			
4. 29	36. 5	4. 46	·1383	15. 1	·03217			
4. 44	35. 30	4. 58	·1399	15. 22⁏	·03208			
4. 56	37. 50	5. 9	·1394	15. 49	·03240			
5. 11	36. 30	5. 22	·1402	16. 44	·03279			
5. 23	36. 55	5. 27	·1397	17. 56	·03295			
5. 28	36. 30	5. 33	·1400	18. 55	·03291			
5. 37	38. 5	6. 2	·1360	19. 8	·03298			
5. 42	36. 20	6. 25	·1387	19. 47	·03283			
5. 54	36. 20	6. 44	·1376	22. 44	·03293			
6. 6	33. 45	7. 4	·1377	23. 59	·03290			
6. 12	28. 5	7. 11	·1374					
6. 21	25. 50	7. 20	·1379					
6. 30	26. 55	7. 55	·1376					
6. 41	25. 55	8. 12	·1370					
6. 54	25. 25	8. 38	·1372					
7. 8	26. 10	9. 15	·1365					
7. 11	25. 30	9. 39	·1383					
7. 24	26. 5	10. 6	·1347					
7. 31	26. 0	10. 13	·1362					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁏ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 7		July 7						
h m	° ′ ″	h m		h m		h m	°	°
7. 57	20. 27. 50	10. 17	·1361					
8. 7	27. 30	10. 34	·1386					
8. 13	25. 50	10. 50	·1355					
8. 23	25. 50	11. 11	·1347					
8. 41	27. 55	11. 24	·1366					
8. 48	27. 5	11. 40	·1357					
9. 0	28. 15	12. 4	·1352					
9. 16	27. 40	12. 20	·1355					
9. 41	40. 20	12. 27	·1360					
9. 58	29. 10	12. 47	·1352					
10. 11	18. 35	13. 12	·1353					
10. 18	20. 10	13. 21	·1349					
10. 26	19. 20	13. 28	·1364					
10. 44	31. 55	13. 40	·1352					
11. 6	24. 0	13. 48	·1352					
11. 23	15. 50	14. 5	·1358					
11. 27	18. 35	14. 12	·1355					
11. 56	14. 45	14. 26	·1355					
12. 11	20. 40	14. 57	·1377					
12. 23	18. 45	15. 14	·1371					
12. 41	15. 35	15. 31	·1349					
12. 57	18. 20	15. 45	·1345					
13. 31	16. 25	16. 6	·1356					
13. 57	15. 55	16. 55	·1362					
14. 27	21. 35	17. 20	·1353					
14. 34	21. 35	17. 33	·1355					
14. 41	23. 20	18. 39	·1350					
15. 10	15. 35	18. 52	·1344					
15. 26	12. 35	19. 14	·1352					
15. 38	13. 30	19. 35	·1350					
15. 42	13. 30	20. 12	·1354					
16. 36	19. 15	20. 47	·1348					
16. 41	17. 55	21. 48	·1334					
16. 54	19. 30	21. 53	·1337					
16. 57	19. 30	22. 9	·1337					
17. 6	20. 45	22. 30	·1350					
17. 13	20. 35	22. 41	·1350					
17. 18	19. 30	22. 58	·1359					
17. 28	20. 45	23. 59	·1363					
17. 47	21. 5							
18. 7	20. 25							
18. 27	20. 0							
18. 37	21. 30							
18. 55	22. 0							
19. 7	25. 55							
19. 23	26. 40							
19. 29	26. 0							
19. 56	25. 30							
20. 12	26. 5							
20. 38	25. 35							
20. 57	28. 5							
21. 39	28. 35							
21. 44	28. 10							
21. 56	29. 20							
22. 9	29. 30							
22. 13	28. 35							
22. 19	29. 10							
22. 26	29. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 7								
h m	° ′ ″	h m		h m		h m	°	°
22. 32	20. 30. 0							
22. 43	29. 20							
23. 23	32. 5							
23. 59	33. 10							
July 8		July 8		July 8		July 8		
0. 0	20. 33. 10	0. 0	·1363	0. 0	·03290	1. 0	66 ·9	67 ·9
0. 38	34. 45	0. 44	·1368	5. 17	·03352	3. 0	66 ·[illegible]	68 ·0
0. 49	35. 50	1. 3	·1366	5. 25	·03347	Max.	67 ·1	68 ·1
1. 1	35. 30	1. 20	·1376	6. 55	·03361	9. 0	66 ·4	67 ·0
1. 23	37. 5	1. 50	·1369	8. 18	·03362	Min.	64 ·7	65 ·7
1. 29	36. 45		* * *	8. 30	·03349	22. 15	65 ·6	66 ·7
1. 39	36. 45	2. 38	·1376	8. 39	·03358			
1. 56	36. 10	3. 13	·1368	13. 3	·03310			
2. 25	36. 35	3. 20	·1375	16. 23	·03291			
3. 11	35. 20	3. 28	·1370	18. 56	·03271			
3. 24	36. 30	3. 32	·1372	19. 2	·03277			
3. 40	35. 40	4. 23	·1381	19. 18	·03268			
3. 58	35. 40	4. 32	·1375	19. 41	·03256			
4. 24	36. 30	4. 40	·1381	22. 10	·03242			
4. 28	35. 45	5. 33	·1376		(†)			
4. 38	35. 35	6. 18	·1391					
4. 41	34. 55	6. 25	·1389					
4. 57	34. 55	6. 56	·1385					
5. 9	34. 0	7. 21	·1386					
5. 18	34. 25	7. 50	·1395					
5. 37	33. 0	8. 29	·1381					
5. 43	33. 0	8. 48	·1423					
6. 12	32. 5	8. 53	·1438					
6. 39	32. 5	9. 9	·1409					
6. 43	32. 40	9. 25	·1405					
6. 56	32. 40	9. 33	·1386					
7. 11	32. 10	9. 42	·1384					
7. 28	32. 50	9. 58	·1372					
7. 45	31. 0	10. 12	·1375					
8. 0	31. 35	10. 19	·1371					
8. 11	30. 45	10. 48	·1374					
8. 26	31. 30	11. 8	·1372					
8. 38	20. 50	11. 25	·1379					
9. 5	27. 5	11. 50	·1376					
9. 12	25. 45	12. 36	·1381					
9. 27	29. 10	13. 50	·1375					
9. 39	26. 50	14. 52	·1379					
9. 45	27. 10	15. 6	·1375					
10. 6	26. 35	15. 13	·1381					
10. 13	27. 35	15. 23	·1379					
10. 29	27. 25	16. 13	·1380					
10. 56	27. 35	17. 6	·1378					
11. 11	25. 30	17. 52	·1376					
11. 31	26. 45	18. 6	·1369					
12. 0	25. 55	18. 14	·1372					
12. 58	25. 40	18. 22	·1369					
13. 11	24. 20	18. 35	·1372					
13. 37	24. 35	19. 0	·1369					
13. 41	25. 40	19. 12	·1363					
13. 56	25. 5	19. 20	·1367					
14. 0	25. 45	19. 34	·1365					
14. 27	24. 5	20. 0	·1365					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 8		July 8						
h m	° ′ ″	h m		h m		h m	°	°
14. 39	20. 25. 30	20. 14	·1370					
14. 57	26. 25	20. 41	·1366					
15. 2	25. 30	20. 49	·1371					
15. 11	25. 45	21. 4	·1363					
15. 15	26. 35	21. 14	·1368					
15. 26	26. 10		***					
16. 4	25. 30	22. 18	·1363					
16. 22	26. 40		***					
16. 29	24. 15	22. 55	·1366					
16. 41	25. 0	23. 19	·1361					
17. 19	24. 30	23. 41	·1374					
17. 27	23. 30	23. 59	·1364					
17. 36	24. 20							
17. 41	23. 5							
17. 54	23. 35							
17. 58	21. 30							
18. 11	23. 15							
18. 23	22. 25							
18. 32	25. 40							
18. 53	23. 10							
18. 59	24. 20							
19. 5	21. 10							
19. 13	25. 15							
19. 38	22. 40							
19. 55	25. 20							
20. 8	24. 30							
20. 11	26. 0							
20. 32	26. 25							
20. 41	25. 0							
20. 57	28. 0							
21. 4	26. 0							
21. 11	25. 30							
21. 24	26. 25							
21. 41	25. 55							
22. 1	27. 20							
22. 10	28. 0							
22. 18	27. 30							
22. 54	29. 50							
23. 2	31. 5							
23. 10	31. 0							
23. 27	32. 30							
23. 38	32. 15							
23. 52	34. 20							
23. 59	33. 20							
July 9		July 9		July 9		July 9		
0. 0	20. 33. 20	0. 0	·1364		(†)	1. 0	65·7	67·5
0. 27	31. 30	0. 19	·1367	0. 30	·03272	Max.	67·1	68·5
1. 41	34. 30	0. 27	·1364	4. 42	·03319	9. 0	65·8	67·0
1. 59	32. 35	1. 36	·1385	4. 53	·03304	Min.	64·2	65·2
2. 12	32. 45	1. 59	·1372	5. 24	·03335	21. 0	64·7	65·6
2. 38	34. 45	2. 35	·1391	6. 4	·03312			
2. 58	34. 25	2. 49	·1391	6. 40	·03307			
3. 12	32. 50	3. 24	·1372	7. 51	·03292			
3. 32	32. 50	3. 30	·1375	14. 32	·03258			
3. 44	33. 30	3. 40	·1373	15. 26	·03239			
3. 59	34. 50	4. 13	·1391	17. 47	·03241			
	***		***	19. 55	·03219			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 9		July 9		July 9				
h m	° ′ ″	h m		h m		h m	°	°
4. 41	20. 32. 30	4. 26	·1392	20. 41	·03225			
4. 55	28. 25	4. 34	·1394	23. 4	·03205			
5. 7	24. 30	4. 48	·1363	23. 59	·03217			
5. 26	28. 5	5. 18	·1399					
5. 57	30. 10	5. 45	·1382					
6. 41	31. 30	5. 52	·1385					
6. 57	30. 40	6. 7	·1380					
7. 45	29. 55	6. 35	·1384					
7. 56	30. 30	6. 54	·1382					
8. 27	29. 10	7. 27	·1385					
8. 55	27. 55	7. 44	·1382					
8. 59	27. 20	7. 58	·1387					
9. 11	27. 45	8. 16	·1389					
9. 26	24. 0	9. 22	·1378					
9. 41	25. 40	9. 40	·1387					
9. 52	25. 40	9. 48	·1384					
10. 8	26. 50	10. 4	·1386					
10. 13	25. 50	10. 14	·1383					
10. 53	26. 15	10. 22	·1384					
12. 40	29. 10	10. 47	·1378					
12. 54	28. 30	11. 4	·1380					
13. 2	27. 55	11. 14	·1378					
13. 23	27. 35	11. 34	·1381					
13. 31	27. 30	11. 54	·1376					
13. 39	28. 20	12. 29	·1380					
14. 11	28. 5	13. 23	·1375					
14. 38	30. 30	13. 39	·1381					
14. 52	29. 30	14. 25	·1376					
15. 11	29. 20	14. 35	·1378					
15. 28	28. 30	14. 42	·1376					
15. 58	29. 25	15. 5	·1383					
16. 39	27. 30	15. 35	·1374					
16. 45	27. 30	15. 46	·1378					
16. 55	26. 15	16. 11	·1373					
17. 11	25. 35	16. 55	·1378					
17. 13	26. 30		***					
17. 24	25. 20	20. 55	·1363					
17. 39	25. 20	23. 10	·1368					
17. 44	27. 30	23. 18	·1362					
17. 55	26. 10	23. 59	·1376					
	***							
19. 9	23. 30							
20. 26	25. 30							
20. 39	26. 55							
20. 56	26. 55							
21. 30	29. 0							
21. 55	29. 20							
22. 26	30. 30							
23. 11	33. 30							
23. 18	33. 5							
23. 54	34. 0							
23. 59	35. 10							
July 10		July 10		July 10		July 10		
0. 0	20. 35. 10	0. 0	·1376	0. 0	·03217	1. 0	65·8	66·4
0. 27	35. 5	1. 5	·1376	1. 33	·03228	3. 0	65·7	66·3
0. 41	36. 0	2. 7	·1384	5. 41	·03255	Max.	66·2	66·7
2. 8	35. 20	2. 43	·1378	5. 49	·03242	9. 0	64·6	66·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 10		July 10		July 10		July 10		
h m	° ′ ″	h m		h m		h m	°	
2. 11	20. 35. 0	3. 16	·1384	6. 29	·03261	Min.	63·2	64·2
2. 31	35. 0	3. 27	·1380	9. 3	·03243	21. 0	64·4	65·0
2. 42	34. 30	3. 43	·1384	11. 57	·03207			
3. 20	34. 50	3. 55	·1379	17. 56	·03175			
3. 28	34. 0	4. 19	·1381	23. 59	·03143			
3. 44	34. 35	4. 58	·1375					
4. 8	33. 55	5. 33	·1379					
4. 15	34. 20	5. 41	·1372					
5. 1	33. 25	6. 24	·1387					
5. 11	33. 40	7. 10	·1382					
5. 41	32. 20	7. 50	·1386					
5. 46	30. 25	8. 21	·1384					
5. 55	30. 10	9. 54	·1386					
6. 8	29. 20	10. 23	·1384					
6. 24	30. 15	11. 20	·1389					
6. 41	30. 25	12. 18	·1381					
7. 18	29. 35	13. 43	·1383					
7. 34	30. 0	15. 34	·1380					
7. 42	29. 10	16. 33	·1382					
8. 9	29. 30	18. 0	·1379					
8. 29	28. 40	21. 11:	·1365					
8. 46	29. 0	23. 59	·1374					
9. 12	28. 50							
9. 47	29. 20							
10. 8	28. 30							
10. 13	29. 10							
10. 32	28. 55							
10. 55	29. 45							
11. 11	28. 30							
11. 34	29. 5							
12. 9	28. 0							
12. 27	27. 50							
12. 41	28. 10							
13. 44	26. 55							
14. 20	27. 50							
14. 39	27. 25							
14. 56	28. 20							
15. 22	27. 40							
15. 52	28. 35							
16. 13	28. 0							
16. 26	26. 55							
16. 45	26. 20							
17. 0	26. 50							
17. 23	26. 0							
17. 39	26. 5							
17. 42	25. 35							
17. 53	25. 50							
17. 57	26. 20							
18. 8	25. 25							
18. 56	25. 25							
19. 52	26. 20							
20. 34	26. 0							
21. 53	28. 0							
22. 20	29. 0							
23. 8	32. 15							
23. 59	34. 10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 11		July 11		July 11		July 11		
h m	° ′ ″	h m		h m		h m		
0. 0	20. 34. 10	0. 0	·1374	0. 0	·03143	1. 0	65·7	66·2
0. 38	34. 5	0. 12	·1370	0. 25	·03142	3. 0	65·8	66·0
0. 48	34. 45	0. 27	·1368	2. 54	·03178	Max.	65·8	66·4
1. 5	34. 10	1. 18	·1378	4. 32	·03192	9. 0	64·8	65·5
1. 11	34. 55	1. 25	·1376	5. 16	·03189	Min.	62·9	63·7
2. 36	34. 40	2. 6	·1384	6. 8	·03201	21. 0	63·3	64·0
3. 5	34. 0	2. 19	·1383	8. 7	·03200	22. 0	63·4	64·1
3. 38	33 25	2. 37	·1385	11. 0	·03170	23. 0	63·6	64·0
3. 47	32. 30	2. 53	·1383	11. 41	·03156			
3. 59	33. 5	3. 41	·1384	13. 20	·03157			
4. 11	32. 35	3. 48	·1379	14. 27	·03151			
4. 37	33. 5	3. 57	·1383	15. 8	·03142			
5. 12	32. 25	4. 12	·1380	16. 21	·03147			
5. 31	31. 30	4. 41	·1385	20. 36	·03122			
5. 51	30. 30	4. 50	·1383	23. 59	·03088			
6. 10	30. 55	5. 11	·1385					
6. 41	30. 30	5. 21	·1382					
6. 59	30. 30	5. 53	·1386					
7. 11	29. 40	6. 4	·1384					
7. 26	29. 40	6. 49	·1387					
7. 41	28. 35	6. 54	·1385					
8. 6	28. 55	7. 12	·1388					
8. 24	28. 45	7. 27	·1387					
8. 53	29. 0	7. 38	·1383					
8. 58	28. 35	7. 56	·1386					
9. 11	28. 35	8. 13	·1382					
9. 24	27. 55	8. 53	·1384					
9. 41	28. 45	9. 20	·1378					
10. 8	27. 25	10. 49	·1377					
10. 38	28. 0	11. 10	·1392					
10. 45	25. 5	11. 25	·1388					
10. 58	25. 40	12. 5	·1376					
12. 46	26. 25	13. 13	·1375					
13. 21	26. 40	13. 34	·1380					
13. 45	27. 15	13. 50	·1379					
14. 12	25. 30	14. 11	·1376					
14. 39	27. 20	14. 59	·1380					
15. 11	25. 5	15. 22	·1379					
15. 30	24. 40	16. 40	·1381					
15. 39	25. 0	22. 0	·1362					
15. 51	24. 30	23. 59	·1376					
16. 8	24. 30							
16. 13	25. 5							
16. 40	24. 35							
17. 11	24. 20							
17. 24	24. 50							
17. 58	25. 5							
18. 14	24. 30							
18. 53	24. 45							
19. 23	24. 35							
19. 30	24. 45							
19. 41	24. 35							
21. 11	26. 30							
21. 26	30. 30							
22. 44	32. 15							
22. 56	32. 30							
23. 27	34. 35							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
July 11	
h m	° ′ ″
23. 56	20. 36. 35
23. 59	36. 50
July 12	
0. 0	20. 36. 50
0. 53	38. 35
1. 26	38. 25
1. 29	41. 30
1. 56	40. 40
2. 8	40. 50
2. 25	39. 25
2. 38	39. 30
2. 46	37. 25
3. 8	37. 25
3. 39	35. 45
3. 54	35. 20
3. 58	37. 0
4. 11	36. 20
4. 29	36. 50
4. 38	35. 50
6. 38	29. 35
10. 36	28. 30
10. 38	28. 55
10. 42	28. 55
10. 57	24. 50
11. 9	24. 25
11. 18	23. 30
11. 31	24. 35
11. 41	25. 55
12. 55	18. 35
12. 59	20. 30
	***
13. 27	22. 55
13. 41	23. 5
13. 43	24. 30
13. 46	19. 5
13. 54	20. 50
14. 10	23. 30
14. 12	24. 55
14. 34	24. 55
14. 39	23. 50
14. 47	23. 50
14. 51	23. 25
14. 57	24. 25
15. 6	22. 0
15. 9	23. 0
15. 12	23. 0
15. 24	25. 30
16. 6	26. 55
16. 8	24. 20
16. 25	24. 45
16. 29	23. 50
16. 38	25. 0
	***
16. 56	24. 35
17. 9	22. 30
17. 13	23. 35
17. 19	23. 20

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
July 12	
0. 0	·1376
1. 30	·1385
1. 52	·1383
4. 21	·1390
4. 48	·1385
5. 22	·1392
6. 1	·1393
6. 25	·1389
7. 14	·1393
10. 25	·1389
10. 31	·1418
10. 43	·1408
10. 49	·1410
11. 14	·1421
11. 26	·1403
11. 39	·1408
12. 2	·1407
12. 22	·1409
12. 38	·1397
12. 44	·1405
12. 48	·1400
12. 51	·1409
12. 54	·1403
13. 8	·1415
13. 10	·1412
13. 18	·1419
13. 20	·1413
13. 32	·1425
13. 36	·1387
13. 41	·1395
13. 51	·1400
14. 0	·1395
14. 10	·1399
14. 12	·1407
14. 22	·1401
14. 28	·1408
14. 33	·1404
14. 52	·1409
14. 57	·1387
15. 10	·1396
15. 19	·1399
15. 31	·1396
15. 54	·1400
16. 4	·1407
16. 18	·1398
16. 41	·1406
16. 46	·1403
16. 55	·1408
17. 53	·1404
18. 12	·1382
18. 24	·1392
18. 48	·1390
18. 57	·1370
19. 17	·1403

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
July 12	
0. 0	·03088
1. 6	·03096
1. 23	·03094
5. 36	·03148
8. 8	·03139
10. 34	·03120
10. 39	·03133
10. 45	·03120
11. 18	·03103
11. 40	·03111
12. 49	·03080
12. 54	·03090
	***
13. 41	·03091
13. 46	·03057
13. 49	·03086
14. 15	·03099
15. 2	·03090
15. 4	·03078
15. 8	·03091
15. 33	·03097
18. 0	·03085
18. 11	·03076
18. 51	·03080
18. 58	·03057
19. 4	·03080
19. 14	·03091
19. 33	·03077
19. 48	·03062
20. 7	·03077
20. 15	·03066
20. 21	·03072
20. 49	·03066
21. 2	·03058
21. 16	·03071
	***
22. 30	·03042
22. 43	·03052
	***
23. 59	·03070

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
July 12		
0. 0	63 ·7	64 ·1
1. 0	64 ·0	64 ·5
2. 0	64 ·4	64 ·8
3. 0	64 ·4	65 ·0
Max.	65 ·0	65 ·9
9. 0	63 ·6	64 ·7
Min.	62 ·6	63 ·8
21. 0	63 ·2	63 ·9
23. 0	63 ·6	64 ·6

Greenwich Mean Solar Time.	Western Declination.
July 12	
h m	° ′ ″
17. 29	20. 23. 20
17. 36	22. 30
17. 44	24. 35
17. 54	27. 30
18. 8	26. 20
18. 25	28. 0
	***
18. 44	29. 0
18. 56	22. 30
19. 11	33. 0
19. 22	31. 25
19. 26	29. 20
19. 37	29. 10
19. 46	27. 0
19. 56	28. 0
20. 6	29. 55
20. 14	27. 15
20. 26	29. 30
20. 38	29. 30
20. 42	31. 5
20. 56	29. 0
21. 2	30. 20
21. 11	33. 0
21. 13	35. 50
21. 26	36. 5
21. 34	34. 10
21. 41	37. 30
21. 55	35. 10
22. 9	36. 50
22. 24	32. 45
22. 54	36. 30
	***
23. 26	36. 45
	***
23. 28	35. 30
23. 59	37. 0
July 13	
0. 0	20. 37. 0
0. 9	37. 0
0. 16	36. 30
0. 25	37. 30
0. 40	36. 20
0. 45	37. 5
1. 25	35. 35
1. 37	36. 30
1. 42	35. 20
1. 46	36. 25
2. 9	36. 35
2. 18	37. 40
2. 26	37. 40
2. 29	37. 0
2. 53	41. 15
2. 57	40. 50
3. 8	41. 30
3. 25	38. 5
3. 41	34. 40
3. 44	34. 40

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
July 12	
h m	
19. 39	·1402
19. 45	·1395
20. 10	·1399
20. 20	·1384
20. 29	·1391
20. 50	·1388
21. 4	·1373
21. 18	·1382
21. 34	·1371
21. 44	·1384
21. 51	·1376
22. 4	·1385
22. 25	·1373
22. 37	·1384
22. 43	·1376
22. 53	·1384
	***
23. 59	·1378
July 13	
0. 0	·1378
0. 44	·1384
	(†)
1. 0	·1379*
1. 50	·1387
1. 59	·1399
2. 22	·1379
2. 34	·1388
2. 57	·1365
3. 12	·1379
3. 26	·1355
3. 34	·1354
3. 48	·1385
3. 52	·1369
4. 10	·1385
4. 13	·1379
4. 25	·1395
4. 39	·1376
4. 55	·1396
5. 11	·1378

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
July 13	
0. 0	·03070
0. 54	·03083
1. 33	·03092
1. 46	·03083
2. 1	·03112
2. 16	·03112
2. 25	·03142
4. 53	·03233
5. 13	·03210
5. 26	{ ·03229 ·03197
6. 34	·03191
7. 3	·03210
7. 35	·03175
10. 0	·03144
10. 57	·03117
11. 11	·03084
11. 26	·03072
12. 33	·03099
12. 45	·03090

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
July 13		
0. 0	63 ·7	64 ·6
1. 0	64 ·2	65 ·1
3. 0	63 ·9	65 ·5
Max.	64 ·4	65 ·9
9. 0	63 ·7	64 ·6
Min.	62 ·7	63 ·8
21. 0	63 ·8	64 ·8

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 13		July 13		July 13				
h m	° ′ ″	h m		h m		h m	°	°
3. 53	20. 33. 50	5. 25	·1386	13. 43	·03101			
3. 57	33. 35	5. 27	·1384	14. 46	·03097			
4. 8	34. 30	5. 34	·1393	15. 11	·03079			
4. 13	34. 0	5. 44	·1396	15. 24	·03079			
4. 25	34. 35	5. 53	·1388	15. 53	·03052			
4. 35	33. 30	6. 10	·1400	16. 18	·03052			
4. 41	34. 30	6. 34	·1386	19. 4	·03091			
4. 55	36. 40	6. 50	·1408	20. 0	·03101			
5. 9	34. 45	7. 9	·1416	20. 41	·03090			
5. 14	35. 10	7. 16	·1414	20. 59	·03081			
5. 23	34. 30	7. 30	·1395	23. 16	·03100			
5. 41	35. 15	7. 42	·1396	23. 59	·03092			
5. 54	33. 35	7. 51	·1392					
5. 59	34. 5	8. 3	·1398					
6. 11	33. 30	8. 20	·1385					
6. 24	32. 0	9. 0	·1390					
6. 37	24. 30	9. 33	·1382					
6. 41	21. 20	10. 10	·1390					
7. 5	26. 30	10. 19	·1387					
7. 11	26. 35	10. 41	·1392					
7. 24	30. 5	10. 46	·1399					
7. 41	29. 15	10. 59	·1402					
7. 44	29. 30	11. 26	·1384					
7. 56	27. 25	11. 42	·1383					
8. 4	27. 45	11. 56	·1389					
8. 16	26. 20	12. 39	·1393					
8. 24	27. 30	12. 55	·1383					
8. 37	26. 55	13. 10	·1381					
9. 8	28. 30	13. 41	·1386					
9. 24	27. 0	13. 52	·1383					
9. 40	26. 10	14. 53	·1387					
9. 59	28. 30	15. 11	·1382					
10. 19	29. 30	15. 26	·1387					
10. 30	29. 35	15. 45	·1383					
10. 41	31. 0	16. 4	·1387					
10. 53	31. 35	16. 58	·1380					
10. 58	33. 5	17. 24	·1382					
11. 11	29. 25		* * *					
11. 26	24. 30	17. 53	·1370					
11. 31	23. 0	18. 33	·1378					
11. 54	24. 40	19. 13	·1377					
12. 14	25. 10		* * *					
12. 26	27. 5	19. 48	·1366					
12. 39	25. 30	20. 4	·1362					
12. 43	25. 30	20. 23	·1346					
12. 56	26. 50	20. 41	·1347					
13. 17	26. 30	20. 54	·1343					
13. 32	28. 0	21. 23	·1352					
14. 9	26. 20	22. 10	·1343					
14. 22	27. 40	22. 31	·1368					
14. 41	31. 50	22. 50	·1372					
15. 21	34. 45	22. 56	·1368					
15. 26	35. 40	23. 12	·1377					
15. 29	35. 25	23. 54	·1374					
15. 33	36. 5	23. 59	·1365					
15. 53	32. 55							
15. 56	31. 25							
16. 11	28. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 13								
h m	° ′ ″	h m		h m		h m	°	°
16. 23	20. 28. 0							
16. 33	29. 25							
16. 53	29. 45							
17. 0	28. 30							
17. 11	28. 30							
	* * *							
18. 22	25. 25							
18. 28	26. 20							
18. 38	25. 15							
18. 43	25. 40							
	* * *							
19. 26	24. 30							
19. 46	29. 5							
20. 22	29. 55							
20. 28	31. 20							
20. 54	30. 30							
21. 1	31. 30							
21. 25	32. 5							
21. 34	32. 30							
21. 54	33. 25							
22. 11	34. 0							
22. 15	32. 0							
22. 24	30. 20							
22. 28	29. 50							
22. 37	31. 5							
22. 46	30. 0							
22. 57	30. 0							
23. 8	29. 5							
23. 16	30. 30							
23. 41	32. 10							
23. 59	34. 10							
July 14		July 14		July 14		July 14		
0. 0	20. 34. 10	0. 0	·1365	0. 0	·03092	1. 0	65·1	66·0
0. 9	35. 0	0. 12	·1372	1. 34	·03111	3. 0	65·8	66·8
0. 12	33. 20	0. 53	·1379	4. 16	·03204	Max.	66·0	67·2
0. 18	34. 10	1. 8	·1374	4. 27	·03207	9. 0	65·2	66·5
0. 38	33. 50	2. 4	·1380	4. 31	·03198	Min.	63·4	64·5
0. 47	34. 10	2. 10	·1386	4. 44	·03207	21. 0	64·4	65·3
0. 54	35. 5	2. 16	·1374	5. 1	·03200			
1. 3	33. 50	2. 42	·1391	5. 12	·03211			
1. 23	36. 5	3. 30	·1357	5. 23	·03197			
1. 34	35. 35	3. 41	·1356	5. 46	·03211			
1. 48	35. 30	3. 50	·1372	6. 48	·03198			
1. 56	36. 10	4. 13	·1381	9. 0	·03191			
2. 0	35. 30	4. 23	·1403		·03053			
2. 8	36. 30	4. 26	·1399	10. 7	·03036			
2. 11	36. 0	4. 37	·1407	10. 59	·03002			
2. 24	35. 50	4. 43	·1398	11. 33	·03010			
2. 37	36. 50	4. 50	·1408	13. 41	·03016			
2. 59	36. 20	5. 10	·1395	15. 57	·02992			
3. 11	37. 0	5. 19	·1407	16. 33	·03000			
3. 34	36. 0	5. 30	·1387	17. 11	·02997			
3. 41	34. 50	5. 49	·1403	17. 53	·02982			
3. 43	34. 5	6. 19	·1392	19. 52	·02977			
3. 56	32. 35	6. 40	·1387	20. 39	·02984			
4. 8	32. 10	6. 54	·1392	21. 7	·02977			
4. 12	34. 0	7. 20	·1389	23. 59	·02990			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 14		July 14						
h m	° ′ ″	h m		h m		h m	°	°
4. 26	20. 34. 50	7. 27	·1394					
4. 31	36. 5	7. 40	·1389					
4. 38	37. 5	7. 51	·1388					
4. 39	36. 20	8. 10	·1390					
4. 53	37. 20	8. 27	·1386					
4. 59	35. 45	8. 30	·1392					
5. 13	31. 10	8. 45	·1384					
5. 26	33. 45	8. 52	·1388					
5. 33	29. 30	9. 22	·1382					
5. 41	30. 5	9. 40	·1384					
6. 8	34. 30	10. 16	·1411					
6. 38	34. 30	11. 2	·1374					
6. 55	33. 35	11. 17	·1376					
7. 46	34. 30	12. 44	·1372					
7. 56	34. 10	13. 13	·1374					
8. 2	34. 10	13. 30	·1372					
8. 9	33. 30	13. 48	·1376					
8. 13	34. 10	14. 8	·1374					
8. 23	33. 30	14. 29	·1362					
8. 35	32. 55	15. 11	·1375					
8. 47	33. 30	15. 48	·1377					
9. 0	33. 0	16. 21	·1367					
9. 29	31. 40	17. 2	·1372					
9. 43	30. 20	17. 25	·1378					
10. 7	26. 40	18. 8	·1370					
10. 16	26. 0	18. 48	·1369					
10. 34	28. 55	19. 19	·1362					
10. 59	29. 40	19. 25	·1365					
11. 23	27. 55	19. 41	·1359					
11. 37	29. 0	20. 40	·1356					
11. 42	28. 30	20. 51	·1359					
12. 1	28. 55	21. 42	·1349					
13. 24	28. 50	21. 47	·1352					
13. 38	30. 5	22. 26	·1352					
13. 44	28. 35	22. 47	·1364					
13. 59	29. 15	23. 21	·1356					
14. 8	31. 10	23. 30	·1360					
14. 13	31. 0	23. 41	·1354					
14. 23	31. 30	23. 59	·1353					
14. 38	31. 55							
14. 56	30. 35							
15. 2	31. 25							
15. 12	30. 35							
15. 28	30. 30							
15. 41	31. 35							
15. 53	30. 20							
16. 11	30. 30							
16. 26	29. 45							
16. 41	29. 20							
16. 57	28. 20							
17. 23	28. 50							
18. 8	26. 35							
18. 16	26. 35							
18. 27	26. 0							
18. 33	26. 25							
18. 42	27. 20							
18. 56	27. 30							
19. 23	30. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 14								
h m	° ′ ″	h m		h m		h m	°	°
19. 37	20. 29. 20							
19. 46	28. 0							
19. 56	28. 45							
20. 9	28. 0							
20. 45	30. 30							
21. 9	30. 30							
21. 38	31. 20							
22. 14	34. 10							
22. 39	32. 5							
22. 56	33. 30							
23. 3	33. 0							
23. 38	34. 30							
23. 54	33. 30							
23. 59	34. 20							
July 15		July 15		July 15		July 15		
0. 0	20. 34. 20	0. 0	·1353	0. 0	·02990	1. 0	65 ·7	67 ·9
0. 3	32. 30	0. 36	·1362	3. 24	·03068	3. 0	65 ·7	68 ·1
0. 25	33. 15	1. 4	·1374	4. 9	·03103	Max.	67 ·0	68 ·7
0. 45	34. 0	1. 20	·1366	5. 19	·03114	9. 0	66 ·6	67 ·9
0. 59	33. 30	1. 52	·1377	6. 18	·03137	Min.	65 ·6	67 ·0
1. 9	34. 0	2. 1	·1371	6. 39	·03126	22. 0	66 ·6	67 ·6
1. 25	33. 30	2. 15	·1370	7. 0	·03139			
1. 39	34. 30	2. 26	·1376	7. 40	·03127			
1. 44	34. 30	2. 37	·1370	10. 35	·03111			
1. 54	34. 0	2. 41	·1374	11. 19	·03086			
1. 57	35. 10		***	11. 56	·03085			
2. 8	34. 45	3. 39	·1351	12. 39	·03076			
2. 28	33. 15	3. 57	·1380	14. 15	·03085			
2. 39	34. 30	4. 7	·1387	15. 11	·03077			
2. 57	34. 30	4. 21	·1375	18. 16	·03101			
3. 16	33. 50	4. 50	·1386	21. 33	·03083			
3. 28	32. 50	4. 57	·1382	23. 59	·03086			
3. 44	29. 30	5. 20	·1377					
3. 57	29. 20	5. 30	·1386					
4. 2	28. 35	5. 53	·1378					
4. 11	29. 30	6. 11	·1388					
4. 26	29. 30	6. 30	·1370					
5. 2	32. 20	6. 40	·1369					
5. 27	32. 35	6. 55	·1392					
6. 12	33. 0	7. 36	·1378					
6. 23	33. 10	8. 7	·1374					
6. 34	31. 0	8. 24	·1372					
6. 42	28. 30	8. 40	·1375					
6. 54	24. 30	8. 49	·1373					
7. 13	29. 35	9. 6	·1385					
7. 26	31. 0	9. 27	·1372					
8. 0	31. 30	9. 41	·1377					
8. 39	30. 30	9. 54	·1372					
9. 26	31. 45	10. 5	·1374					
9. 47	30. 30	10. 37	·1373					
9. 59	28. 50	11. 20	·1380					
10. 10	28. 50	11. 28	·1376					
10. 24	28. 30	11. 42	·1375					
10. 28	29. 25	11. 50	·1371					
10. 41	29. 35	12. 2	·1373					
10. 54	27. 50	12. 12	·1372					
11. 26	28. 0	12. 24	·1373					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 15		July 15						
h m	° ′ ″	h m		h m		h m	°	°
11. 37	20. 28. 20	12. 34	·1371					
11. 58	31. 10	12. 41	·1373					
12. 10	31. 0	12. 44	·1369					
12. 22	31. 30	13 8	·1365					
12. 56	29. 35	13. 22	·1368					
13. 25	29. 55	13. 41	·1365					
13. 55	29. 20	14. 25	·1371					
14. 10	28. 55	15. 29	·1365					
14. 26	29. 15	16. 17	·1373					
14. 38	28. 5	16. 41	·1369					
14. 58	28. 0		***					
15. 11	27. 30	17. 59	·1371					
15. 23	28. 5	18. 25:	·1370					
15. 43	28. 5	18. 54	·1361					
15. 59	28. 30	19. 12	·1364					
16. 25	27. 10	19. 26	·1357					
17. 9	26. 30	19. 43	·1360					
	***	20. 4	·1355					
17. 39	26. 20	20. 40	·1364					
	***	21. 39	·1368					
17. 59	25. 0	22. 0	·1358					
18. 15	26. 50	22. 46	·1359					
18. 29	26. 25	23. 11	·1348					
18. 39	26. 35	23. 59	·1353					
18. 45	25. 5							
19. 7	28. 25							
19. 12	28. 25							
19. 38	30. 0							
19. 53	29. 30							
20. 16	31. 30							
20. 34	31. 30							
21. 15	28. 50							
21. 39	30. 30							
	***							
22. 12	30. 30							
23. 26	34. 55							
23. 30	34. 35							
23. 59	35. 25							
July 16		July 16		July 16		July 16		
0. 0	20. 35. 25	0. 0	·1353	0. 0	·03086	Min.	67·3	68·0
0. 10	35. 25	0. 14	·1361	0. 38	·03092	1. 0	67·6	68·2
0. 43	36. 5	0. 40	·1359	1. 2	·03092	9. 0	67·6	68·7
0. 53	36. 40	1. 43	·1369	1. 53	·03104	Max.	68·0	69·6
1. 2	36. 0	1. 56	·1367	4. 18	·03158	21. 0	67·5	68·8
1. 15	37. 0	2. 10	·1377	4. 27	·03147			
1. 44	36. 40	2. 34	·1366	5. 48	·03180			
1. 56	36. 20	2. 41	·1373	6. 53	·03172			
2. 8	36. 50	2. 45	·1367	8. 29	·03172			
2. 24	36. 0	2. 48	·1375	8. 56	·03155			
2. 28	36. 0	3. 6	·1365	14. 19	·03149			
2. 31	35. 30	3. 20	·1377	14. 45	·03154			
2. 39	36. 5		***	15. 16	·03142			
2. 43	35. 30	3. 48	·1365	15. 57	·03147			
2. 56	35. 30	3. 53	·1372	16. 11	·03139			
3. 2	34. 35	4. 14	·1369	16. 46	·03148			
3. 16	35. 30	4. 25	·1371	17. 6	·03132			
	***	4. 34	·1364	18. 26	·03137			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 16		July 16		July 16				
h m	° ′ ″	h m		h m		h m	°	°
3. 57	20. 32. 50	4. 43	·1371	19. 14	·03126			
4. 16	32. 30	4. 46	·1368	20. 37	·03137			
4. 25	32. 5	5. 12	·1378	23. 59	·03146			
4. 31	31. 5	5. 20	·1376					
4. 58	31. 5	5. 39	·1383					
5. 14	30. 30	5. 54	·1379					
5. 27	30. 30	6. 39	·1371					
5. 39	31. 30	6. 57	·1378					
6. 16	31 30	7. 14	·1377					
6. 41	30. 50	7. 28	·1383					
6. 57	31. 35	8. 23	·1381					
7. 10	31 35	8. 38	·1391					
7. 14	31. 55	9. 19	·1376					
7. 28	31. 55	10. 13	·1385					
7. 53	29. 55	10. 16	·1381					
7. 58	30. 20	10. 59	·1378					
8. 10	30. 20	12. 14	·1378					
8. 41	33. 0	12. 27	·1382					
9. 12	31. 25	13. 19	·1371					
9. 38	32. 0	13. 30	·1377					
9. 44	31. 45	13. 41	·1374					
9. 58	32. 50	13. 50	·1377					
10. 10	31. 40	14. 29	·1370					
10. 14	32. 10	14. 57	·1375					
10. 24	31. 40	15. 57	·1370					
10. 39	32. 5	16. 25:	·1359					
11. 6	30. 25	17. 6	·1372					
11. 38	30. 25	17. 34	·1369					
11. 51	31. 30	18. 26	·1370					
12. 8	31. 0	18. 40	·1378					
12. 17	31. 30	20. 15	·1356					
12. 38	30. 30	20. 23	·1358					
12. 55	31. 30	21. 6	·1349					
12. 59	31. 10	21 53	·1347					
13. 26	32. 10	22. 6	·1352					
13. 39	31. 15	22. 25	·1347					
13. 46	31. 25	23. 15	·1356					
13. 58	30. 30	23. 59	·1336					
14. 16	30. 30							
14. 29	31. 5							
14. 45	33. 0							
14. 53	31. 40							
14. 59	31. 30							
15. 11	30. 5							
15. 34	29. 20							
15. 54	30. 30							
16. 8	32. 10							
16. 16	29. 55							
16. 28	31. 0							
16. 40	31. 0							
16. 53	32. 50							
16. 58	32. 10							
17. 4	30. 0							
17. 11	29. 10							
17. 26	28. 0							
17. 37	28. 30							
17. 56	28. 30							
18. 7	29. 20							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 16								
h m	° ′ ″	h m		h m		h m	°	°
18. 11	20. 28. 30							
18. 15	29. 40							
18. 23	29. 0							
18. 30	30. 55							
18. 38	30. 55							
18. 55	29. 50							
19. 14	29. 45							
19. 24	27. 50							
19. 28	29. 0							
19. 41	28. 0							
19. 48	28. 50							
19. 56	28. 10							
20. 8	28. 50							
20. 11	28. 20							
20. 17	29. 5							
20. 27	28. 40							
20. 41	30. 30							
21. 23	29. 40							
22. 1	30. 30							
22. 11	29. 45							
22. 26	31. 10							
22. 32	30. 35							
23. 12	33. 25							
23. 24	32. 35							
23. 32	33. 0							
23. 44	32. 35							
23. 56	32. 15							
23. 59	33. 35							
July 17		July 17		July 17		July 17		
0. 0	20. 33. 35	0. 0	·1336	0. 0	·03146	1. 0	67·6	69·2
0. 14	33. 25	0. 10	·1338	1. 16	{·03148	3. 0	67·9	69·2
0. 39	34. 0	0. 18	·1356		·03169	Max.	68·4	69·4
0. 58	33. 25	0. 52	·1364		***	9. 0	68·1	69·0
1. 9	35. 40	1. 3	·1379	3. 3	·03218	Min.	66·0	66·6
1. 19	35. 30	1. 30	·1380	4. 20	·03237	21. 0	66·7	67·5
1. 56	35. 35	1. 42	·1373	4. 29	·03229			
1. 59	36. 50	2. 5	·1356	5. 4	·03254			
2. 26	32. 30	2. 12	·1371	5. 12	·03243			
2. 42	33. 5	2. 22	·1361	8. 8	·03221			
2. 53	32. 30	2. 25	·1369	8. 24	·03200			
3. 11	34. 25	2. 48	·1372	8. 33	·03204			
3. 24	32. 30	3. 4	·1366	9. 7	·03183			
4. 2	34. 30	3. 18	·1361	12. 19	·03164			
4. 11	34. 30	3. 34	·1371	12. 34	·03142			
4. 14	34. 50	3. 44	·1366	12. 46	·03142			
4. 26	34. 20	4. 4	·1386	13. 13	·03092			
4. 39	34. 20	4. 10	·1388	13. 37	·03087			
4. 42	26. 30	4. 22	·1398	14. 6	·03111			
4. 48	23. 30	4. 28	·1383	15. 16	·03113			
5. 7	27. 50		***	15. 56	·03134			
5. 10	27. 50	4. 45	·1374	17. 11	·03142			
5. 18	28. 25	4. 57	·1401	18. 30	·03136			
5. 25	27. 30	5. 6	·1405	19. 0	·03119			
5. 33	29. 30	5. 13	·1387	21. 8	·03117			
5. 41	30. 0	5. 22	·1393		(†)			
5. 44	29. 0	5. 42	·1388					
5. 59	29. 35	5. 49	·1383					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 17		July 17						
h m	° ′ ″	h m		h m		h m	°	°
6. 6	20. 28. 40	6. 6	·1379					
6. 43	31. 25	6. 8	·1375					
6. 53	32. 30	6. 16	·1381					
6. 57	31. 30	6. 20	·1377					
7. 11	31. 20	6. 33	·1381					
7. 39	28. 0	6. 46	·1376					
7. 46	28. 50	7. 0	·1392					
7. 56	26. 45		***					
8. 10	31. 0	7. 26	·1384					
8. 17	24. 30	7. 29	·1387					
8. 29	27. 10	7. 35	·1381					
8. 39	26. 35	7. 42	·1384					
8. 56	30. 0	7. 57	·1382					
9. 1	30. 35	8. 9	·1385					
9. 24	29. 10	8. 21	·1379					
9. 41	30. 30	8. 34	·1393					
9. 56	30. 20	8. 42	·1386					
10. 7	29. 45	8. 50	·1388					
10. 18	30. 30	9. 25	·1368					
10. 41	31. 0	9. 42	·1372					
10. 53	31. 20	10. 11	·1370					
11. 9	30. 30	10. 22	·1375					
11. 26	31. 10	10. 44	·1372					
11. 38	32. 5	11. 15	·1371					
11. 42	31. 25	11. 42	·1380					
11. 54	28. 35	11. 48	·1378					
12. 11	31. 25	11. 56	·1381					
12. 27	28. 30	12. 3	·1380					
12. 38	31. 30	12. 25	·1388					
12. 49	39. 55	12. 57	·1376					
13. 39	28. 0	13. 27	·1389					
13. 54	28. 0	14. 4	·1373					
13. 58	26. 40	14. 12	·1377					
14. 11	29. 20	14. 24	·1373					
14. 23	27. 45	14. 51	·1376					
14. 28	27. 45	15. 27	·1362					
14. 41	29. 0	15. 42	·1361					
15. 26	24. 35	15. 53	·1368					
15. 41	24. 55	16. 18	·1368					
15. 54	27. 30	16. 44	·1363					
16. 9	25. 30	17. 49	·1373					
16. 23	26. 30	18. 27	·1367					
16. 29	26. 25	18. 39	·1369					
17. 7	26. 55	18. 46	·1368					
17. 56	24. 40	19. 14	·1327					
18. 9	24. 40	19. 28	·1340					
18. 32	29. 20	19. 36	·1340					
18. 46	30. 30	19. 50	·1347					
19. 3	30. 30	20. 32	·1344					
19. 11	32. 5	20. 59	·1331					
19. 13	31. 0	21. 8	·1340					
19. 26	32. 10		(†)					
19. 29	31. 40							
19. 39	32. 30							
19. 56	31. 40							
20. 7	31. 40							
20. 13	32. 30							
20. 26	31. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 17								
h m	° ′ ″	h m		h m		h m	°	°
20. 29	20. 32. 30							
20. 43	31. 40							
20. 59	32. 55							
21. 15	32. 30							
	(†)							
July 18		July 18		July 18		July 18		
1. 0	20. 36. 17*	1. 0	·1369*	1. 0	·03082*	Max.	67·0	67·0
3. 0	35. 6*	3. 0	·1381*	3. 0	·03085*	1. 0	66·4	66·2
9. 0	31. 38*	9. 0	·1430*	9. 0	·02956*	3. 0	64·3	64·7
21. 0	32. 21*	21. 0	·1366*	21. 0	·02802*	9. 0	62·2	62·5
						Min.	61·0	61·4
						21. 0	62·6	62·2
						22. 0	62·6	62·0
						23. 0	63·6	62·1
July 19		July 19		July 19		July 19		
	(†)		(†)		(†)	0. 0	62·7	62·4
1. 0	20. 38. 53*	1. 0	·1384*	1. 0	·02802*	1. 0	62·8	62·4
2. 42	37. 0	3. 0	·1381*	3. 7	·02799	2. 0	63·0	62·2
3. 12	36. 20	3. 15	·1382	5. 16	·02848 ·02863	3. 0	63·2	63·0
3. 38	35. 30	3. 25	·1388			Max.	64·1	64·8
3. 57	35. 30	3. 34	·1384	7. 16	·02884	9. 0	63·8	64·4
4. 13	34. 0	3. 41	·1386	7. 32	·02878	Min.	60·5	61·9
4. 54	34. 30	3. 49	·1379	7. 53	·02889	21. 0	62·6	63·9
5. 14	32. 30	4. 9	·1392	8. 34	·02890	22. 0	62·5	63·0
5. 32	32. 40	4. 23	·1386	9. 4	·02883	23. 0	63·1	63·4
5. 44	32. 0	4. 36	·1391	12. 46	·02792			
6. 6	32. 30	4. 44	·1394	14. 0	·02801			
6. 26	31. 0	5. 9	·1408	15. 15	·02784			
6. 42	31. 30	5. 33	·1396	15. 46	·02789			
7. 9	29. 30	5. 40	·1399	16. 41	·02774			
7. 23	29. 30	5. 49	·1397	17. 56	·02779			
7. 41	25. 40	6. 0	·1406	18. 27	·02763			
7. 56	27. 10	6. 10	·1406	19. 9	·02781			
8. 1	26. 55	6. 27	·1397	21. 14	·02800			
8. 11	27. 0	6. 39	·1400		(†)			
8. 29	29. 5	6. 49	·1396					
9. 16	30. 50	6. 58	·1400					
9. 37	29. 35	7. 10	·1394					
9. 56	30. 30	7. 16	·1401					
10. 8	30. 30	7. 23	·1401					
10. 13	29. 55	7. 30	·1388					
10. 18	29. 55	7. 43	·1389					
10. 26	29. 20	7. 51	·1395					
10. 39	30. 55	8. 5	·1392					
10. 54	30. 50	8. 34	·1393					
10. 57	30. 0	8. 43	·1390					
11. 1	30. 0	9. 4	·1395					
11. 23	28. 0	9. 20	·1393					
11. 42	32. 30	10. 5	·1398					
12. 26	27. 20	10. 16	·1396					
12. 46	24. 30	10. 26	·1398					
13. 39	28. 30	10. 32	·1406					
13. 46	30. 10	10. 54	·1398					
13. 54	30. 10	11. 5	·1400					
14. 3	31. 45	11. 19	·1397					
14. 17	31. 0	11. 45	·1410					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 19		July 19						
h m	° ′ ″	h m		h m		h m	°	°
14. 26	20. 31. 10	11. 53	·1407					
14. 39	32. 5	12. 4	·1409					
15. 9	30. 0	13. 13	·1388					
15. 34	29. 10	13. 42	·1393					
15. 57	30. 15	13. 51	·1389					
16. 9	29. 55	14. 4	·1393					
16. 24	27. 35	14. 20	·1393					
16. 42	27. 35	14. 37	·1397					
16. 54	25. 30	15. 10	·1391					
17. 29	27. 0	16. 2	·1396					
17. 45	27. 20	16. 10	·1399					
18. 7	30. 45	16. 34	·1400					
18. 41	27. 30	17. 13	·1389					
18. 57	30. 0		* * *					
19. 10	33. 15	17. 52	·1379					
19. 16	33. 5	18. 11	·1387					
19. 33	34. 10	18. 48	·1379					
19. 39	32. 35	18. 59	·1379					
19. 43	33. 10	19. 25	·1361					
19. 54	32. 50	19. 36	·1364					
20. 11	34. 0	19. 44	·1359					
20. 41	33. 45	20. 6	·1374					
20. 45	31. 30		* * *					
21. 12	30. 0	21. 12	·1381					
	(†)		(†)					
July 20		July 20		July 20		July 20		
	(†)		(†)		(†)	0. 0	65·6	67·0
1. 0	20. 35. 18*	1. 0	·1379*	1. 0	·02759*	1. 0	66·6	65·3
3. 0	37. 23*	3. 0	·1377	3. 0	·02865	2. 0	67·6	65·2
3. 24	35. 20	3. 36	·1386	4. 32	·02883	Max.	67·8	68·2
4. 27	32. 30	3. 56	·1375	7. 12	·02936	3. 0	66·7	66·[illegible]
4. 43	30. 5	4. 11	·1383	7. 30	·02924	9. 0	65·1	67·0
5. 13	31. 30	4. 22	·1378	12. 42	·02874	Min.	62·6	63·7
5. 47	30. 35	4. 36	·1385	13. [illegible]	·02839	21. 0	64·4	65·6
6. 14	30. 50	4. 47	·1381	13. [illegible]	·02831			
6. 40	30. 0	4. 59	·1387	16. [illegible]	·02858			
6. 53	28. 50	5. 25	·1394	18. 23	·02846			
6. 57	28. 35	5. 59	·1390	19. 54	·02857			
7. 11	25. 10	6. 17	·1403	22. 56	·02875			
7. 26	28. 20	6. 34	·1385	23. 59	·028[illegible]			
7. 31	28. 20	7. 5	·1404					
7. 41	28. 55	7. 19	·1419					
7. 53	28. 25	7. 30	·1407					
7. 59	28. 50	7. 39	·1407					
8. 8	28. 0	7. 48	·1400					
8. 14	28. 0	7. 55	·1403					
8. 38	29. 20	8. 5	·1399					
8. 53	27. 50	8. 21	·1407					
8. 59	27. 40	8. 52	·1397					
9. 13	26. 40	9. 19	·1401					
9. 27	26. 50	10. 0	·1393					
9. 42	26. 25	10. 12	·1390					
9. 56	27. 5	10. 17	·1392					
10. 12	26. 20	10. 42	·1387					
10. 29	26. 55	11. 10	·1391					
10. 41	26. 55	11. 16	·1389					
10. 47	26. 15	11. 25	·1392					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

July 18. There were no photographic records for the three Magnetometers, owing to the gas being cut off throughout the day.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 20		July 20						
h m	° ′ ″	h m		h m		h m	°	°
11. 28	20. 26. 40	11. 41	·1389					
11. 39	26. 25	11. 52	·1392					
11. 59	26. 30	12. 6	·1388					
12. 41	30. 30	12. 54	·1387					
12. 53	32. 45	13. 26	·1401					
12. 58	32. 20	14. 49	·1386					
13. 25	32. 40	15. 50	·1390					
13. 57	27. 30	17. 22	·1390					
14. 31	26. 20	17. 39	·1387					
14. 56	27. 20	18. 1	·1390					
15. 40	27. 30	18. 41	·1383					
16. 41	26. 20		***					
16. 47	26. 35	21. 10	·1378					
16. 57	26. 5	21. 20	·1374					
17. 26	26. 15		***					
17. 33	25. 30	22. 22	·1376					
18. 23	27. 10	22. 51	·1368					
18. 34	28. 40	23. 0	·1343					
18. 41	28. 25	23. 51	·1346					
18. 54	30. 5	23. 59	·1353					
18. 58	29. 55							
19. 8	30. 30							
19. 43	29. 50							
19. 58	30. 40							
20. 11	30. 15							
20. 26	30. 50							
20. 54	30. 0							
21. 25	31. 30							
21. 34	33. 0							
21. 54	33. 20							
21. 57	33. 20							
22. 0	34. 0							
22. 5	33. 30							
22. 12	34. 55							
22. 13	33. 0							
22. 24	34. 5							
22. 29	34. 5							
22. 43	36. 10							
22. 54	36. 0							
22. 59	37. 20							
23. 11	36. 55							
23. 28	38. 10							
23. 59	38. 30							
July 21		July 1		July 21		July 21		
0. 0	20. 38. 30	0. 0	·1353	0. 0	·02896	1. 0	65·8	67·3
0. 17	37. 40	0. 4	·1360	2. 2	·02928	3. 0	65·4	67·0
1. 39	38. 20	0. 38	·1367	4. 27	·02950	Max.	66·4	67·9
1. 53	37. 45	0. 44	·1342	6. 14	·02966	9. 0	65·8	67·4
2. 9	38. 10	1. 36	·1337	10. 0	·02970	Min.	63·8	65·2
2. 19	37. 35	2. 6	·1345	11. 15	·02957	21. 0	64·6	65·5
3. 26	36. 30	2. 33	·1338	11. 29	·02962			
3. 53	37. 0	2. 58	·1343	11. 57	·02924			
3. 59	36. 30	3. 16	·1352	12. 33	·02907			
4. 57	34. 30	3. 34	·1346	13. 2	·02895			
5. 24	33. 5	3. 55	·1357	14. 33	·02898			
6. 8	31. 30	4. 17	·1337	14. 48	·02907			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
July 21		July 21		July 21				
h m	° ′ ″	h m		h m		h m	°	
6. 38	20. 31. 50	4. 26	·1337	15. 12	·02886			
6. 53	31. 20	4. 45	·1346	17. 4:	·02919			
7. 13	31. 0	5. 4	·1344	18. 6	·02942			
8. 10	31. 5	5. 13	·1338	18. 39	·02961			
8. 28	30. 30	5. 26	·1338	20. 24	·02929			
9. 7	29. 45	5. 35	·1354	21. 39	·02924			
9. 56	25. 30	6. 20	·1374	23. 12	·02891			
10. 9	26. 5	6. 40	·1365		(†)			
10. 12	27. 0	7. 25	·1371					
10. 16	27. 0	7. 39	·1368					
10. 27	24. 55	8. 12	·1371					
10. 39	24. 55	8. 18	·1375					
10. 45	25. 25	9. 7	·1365					
11. 0	24. 55	9. 18	·1366					
11. 12	28. 30	9. 35	·1364					
11. 27	39. 40	10. 18	·1369					
11. 34	40. 0	10. 38:	·1365					
11. 48	35. 5	10. 50	·1368					
11. 58	34. 30	11. 27	·1356					
12. 13	30. 20	11. 39	·1359					
12. 29	30. 50	11. 52	·1351					
12. 56	24. 35	12. 49	·1384					
13. 28	25. 5	13. 14	·1374					
13. 40	27. 0	13. 19	·1374					
13. 43	26. 40	13. 47	·1356					
13. 56	27. 45	13. 57	·1355					
14. 34	28. 40	14. 6	·1357					
14. 58	40. 55	14. 32	·1353					
15. 31:	30. 10	15. 5	·1350					
16. 8	26. 10	15. 23	·1356					
16. 53	25. 0	15. 38	·1355					
17. 24	25. 30	16. 24	·1360					
17. 27	25. 0	16. 30	·1358					
17. 39	25. 50	18. 8	·1361					
18. 8	25. 30	19. 6	·1356					
18. 38	24. 55	19. 14	·1358					
18. 41	25. 40	20. 54	·1346					
18. 53	24. 15	22. 15	·1346					
19. 8	26. 45	23. 11	·1349					
19. 16	25. 30	23. 23	·1356					
19. 40	26. 0	23. 59	·1345					
	***							
20. 2	27. 20							
20. 9	26. 30							
	***							
20. 38	29. 0							
20. 56	28. 0							
21. 9	28. 50							
21. 26	27. 30							
21. 40	28. 40							
22. 8	28. 30							
23. 0	31. 55							
23. 9	32. 0							
23. 29	34. 20							
23. 41	34. 20							
23. 59	36. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Of Thermometers. Of H. F. Magnet.	Of Thermometers. Of V. F. Magnet.
July 22		July 22		July 22		July 22		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 36. 30	0. 0	·1345		(†)	1. 0	65 ·6	66 ·5
0. 11	37. 0	0. 52	·1352	1. 0	·02931*	3. 0	66 ·6	67 ·4
	(†)	1. 11	·1359	1. 46	·02954	Max.	67 ·2	67 ·7
1. 0	38. 37*	1. 39	·1360	2. 43	·03004	9. 0	64 ·6	65 ·9
2. 26	38. 0	1. 49	·1373	5. 8	·03007	Min.	63 ·6	65 ·1
2. 53	39. 5	1. 56	·1366	5. 36	·03019	23. 0	65 ·8	67 ·2
3. 9	37. 10	2. 4	·1372	6. 13	·03008			
3. 13	37. 10	2. 8	·1368	7. 36	·03027			
3. 38	35. 5	2. 14	·1374	8. 19	·03023			
3. 56	35. 0	2. 35	·1361	11. 16	·02931			
4. 13	33. 30	2. 52	·1373	12. 47	·02932			
4. 41	34. 40	3. 12	·1352	13. 45	·02917			
4. 56	34. 30	3. 36	·1354	14. 16	·02920			
5. 41	33. 45	3. 58	·1377	14. 53	·02898			
5. 48	34. 50	4. 14	·1361	15. 38	·02895			
6. 7	33. 0	4. 24	·1368	16. 23:	·02874			
6. 23	32. 45	4. 34	·1365	18. 23	·02941			
6. 41	29. 25	4. 43	·1370	19. 6	·02939			
6. 53	30. 0	5. 18	·1358	20. 15	·02958			
6. 57	29. 10	5. 45	·1374	21. 14	·02937			
7. 5	29. 10	5. 52	·1367	23. 0	·02941			
7. 11	28. 20	6. 26	·1358	23. 29	·02952			
7. 31	29. 0	6. 50	·1362		(†)			
8. 16	31. 0	7. 2	·1367					
8. 56	31. 20	7. 8	·1365					
9. 11	32. 5	7. 19	·1370					
9. 18	31. 10	7. 58	·1362					
9. 38	32. 40	8. 13	·1364					
9. 53	30. 10	8. 36	·1363					
10. 0	31. 0	8. 57	·1368					
10. 23	26. 0	9. 39	·1379					
10. 39	32. 30	10. 22	·1363					
10. 58	33. 0	10. 40	·1387					
11. 18	31. 30	11. 11	·1374					
11. 30	31. 0	12. 4	·1364					
11. 41	29. 0	12. 23	·1370					
11. 57	24. 20	12. 24	·1362					
12. 14	24. 20	13. 11	·1367					
12. 41	25. 30	13. 22	·1362					
13. 9	32. 20	13. 46	·1359					
13. 38	32. 30	14. 34	·1386					
14. 12	33. 15	14. 53	·1384					
14. 28	29. 5	15. 6	·1379					
14. 45	25. 30	15. 24	·1374					
15. 10	26. 30	15. 51	·1360					
15. 26	31. 20	16. 9	·1362					
15. 39	33. 50	16. 50	·1363					
15. 56	33. 5	16. 56	·1358					
16. 14	35. 35	17. 11	·1359					
16. 26	35. 35	17. 22	·1356					
16. 56	29. 50	17. 43	·1363					
17. 13	27. 45	18. 8	·1356					
17. 26	27. 10	18. 26	·1363					
17. 38	28. 20	19. 11	·1338					
17. 43	27. 30	19. 42	·1342					
17. 53	26. 20	20. 17	·1348					
17. 57	28. 0	21. 19:	·1339					
18. 2	25. 30	22. 18	·1341					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 22		July 22						
h m	° ′ ″	h m		h m		h m	°	°
18. 24	20. 31. 0	22. 59	·1301					
18. 41	31. 45	23. 59	·1344					
18. 56	30. 30							
19. 5	29. 0							
19. 19	29. 45							
19. 26	28. 55							
19. 34	29. 30							
19. 41	28. 25							
19. 56	28. 35							
20. 13	32. 5							
20. 28	31. 50							
20. 41	33. 0							
21. 8	30. 0							
21. 42	30. 25							
22. 23	32. 10							
22. 56	34. 15							
23. 55	37. 0							
23. 59	36. 0							
July 23		July 23		July 23		July 23		
0. 0	20. 36. 0	0. 0	·1344		(†)	1. 0	66 ·8	67 ·8
0. 14	35. 10	0. 15	·1353	1. 0	·02986*	Max.	67 ·3	68 ·9
0. 25	35. 20	0. 56	·1358	6. 7	·03036	8. 0	67 ·1	68 ·3
0. 43	33. 50	1. 46	·1354	7. 10	·03043	Min.	65 ·0	65 ·6
1. 26	37. 0	2. 5	·1361	7. 43	·03037	21. 0	65 ·9	67 ·2
2. 8	38. 10	2. 12	·1357	15. 28	·03000			
2. 13	37. 50	2. 27	·1360	18. 0	·02987			
2. 37	37. 0	2. 32	·1357	19. 1	·02978			
2. 56	37. 50	2. 41	·1365	19. 53	·02964			
3. 5	36. 40	3. 4	·1350	21. 9	·02962			
3. 24	36. 5	3. 30	·1353		(†)			
4. 8	36. 45	3. 54	·1362					
4. 23	35. 35	4. 2	·1356					
4. 29	34. 25	4. 9	·1364					
4. 42	32. 20	4. 12	·1356					
5. 23	33. 25	4. 36	·1348					
6. 0	32. 30	4. 50	·1360					
6. 56	30. 10	5. 21	·1362					
7. 53	31. 5	5. 56	·1370					
9. 38	29. 50	6. 35	·1361					
10. 0	30. 10	6. 56	·1365					
10. 24	27. 5	9. 57	·1355					
10. 57	29. 30	10. 10	·1360					
11. 11	28. 5	11. 4	·1362					
11. 40	30. 0	11. 20	·1356					
11. 57	32. 5	12. 3	·1357					
13. 48	28. 35	12. 25	·1361					
14. 2	29. 5	14. 42	·1360					
14. 18	28. 40	15. 27	·1357					
14. 53	31. 0	16. 10	·1362					
15. 29	31. 25	16. 37	·1360					
16. 25	27. 30	16. 49	·1362					
16. 57	31. 25	17. 12	·1356					
17. 6	31. 0	17. 45	·1345					
17. 26	33. 10		(†)					
17. 39	32. 30	19. 32	·1337					
17. 48	34. 25	20. 37	·1340					
17. 56	34. 35	21. 5	·1336					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
July 23	
h m	° ′ ″
18. 8	20. 35. 20
18. 19	34. 5
18. 36	34. 0
18. 53	35. 30
19. 33	28. 0
19. 46	29. 5
19. 56	28. 5
20. 8	29. 10
20. 25	28. 0
20. 54	31. 10
21. 9	29. 30
21. 54	30. 30
22. 9	29. 50
23. 14	33. 0
23. 26	34. 20
23. 59	35. 35
July 24	
0. 0	20. 35. 35
0. 37	37. 45
1. 11	37. 55
1. 18	37. 0
1. 45	37. 0
2. 23	34. 15
2. 29	36. 50
3. 3	35. 50
3. 26	34. 20
4. 18	33. 10
4. 29	33. 50
5. 8	33. 5
5. 12	33. 50
5. 23	33. 0
5. 32	33. 0
5. 43	32. 0
5. 59	32. 0
6. 11	30. 55
6. 27	28. 50
6. 43	29. 55
6. 58	28. 20
7. 23	30. 10
7. 43	30. 45
7. 58	30. 0
8. 27	29. 30
8. 53	30. 30
10. 9	31. 0
10. 25	30. 25
10. 32	29. 20
11. 2	28. 40
11. 32	28. 40
12. 0:	29. 25
12. 23	25. 50
12. 33	23. 20
12. 55	28. 50
13. 18	33. 10
14. 11	24. 25
14. 26	26. 5
15. 28	28. 50
17. 23	26. 20

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
July 23	
h m	
21. 20	·1332
21. 44	·1331
22. 21	·1339
22. 27	·1336
22. 48	·1344
23. 29	·1344
23. 59	·1348
July 24	
0. 0	·1348
0. 20	·1345
1. 44	·1349
2. 10	·1342
2. 45	·1360
3. 19	·1354
3. 25	·1359
4. 20	·1358
4. 32	·1368
5. 0	·1356
5. 10	·1356
5. 15	·1366
5. 28	·1361
5. 41	·1365
5. 54	·1359
6. 9	·1359
6. 24	·1349
6. 43	·1362
6. 56	·1356
7. 15	·1367
7. 35	·1359
8. 23	·1356
8. 44	·1362
9. 10	·1359
9. 19	·1362
9. 41	·1359
9. 53	·1362
11. 33	·1356
12. 4	·1378
13. 0	·1330
13. 56	·1361
14. 34	·1350
15. 32	·1352
18. 38	·1346
	***
21. 11	·1338
21. 23	·1333
22. 3	·1336
	(†)

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
July 24	
	(†)
0. 54	·03002
2. 9	·03038
6. 18	·03069
6. 41	·03081
7. 13	·03079
11. 57	·03074
12. 39	·03035
13. 23	·03037
13. 53	·03018
15. 59:	·03047
18. 53	·03038
19. 54	·03040
21. 12	·03034
23. 59	·03051

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
July 24		
1. 0	67 ·2	67 ·3
3. 0	67 ·2	69 ·0
Max.	67 ·9	69 ·7
9. 0	66 ·4	69 ·0
Min.	66 ·1	67 ·3
21. 0	67 ·2	68 ·3

Greenwich Mean Solar Time.	Western Declination.
July 24	
h m	° ′ ″
19. 2	20. 25. 55
19. 26	26. 55
20. 12	26. 35
20. 41	26. 55
20. 56	27. 55
21. 30	28. 35
22. 44	31. 50
23. 41	36. 20
23. 56	36. 55
23. 59	37. 20
July 25	
0. 0	20. 37. 20
1. 45	39. 20
	(†)
3. 19	38. 50
3. 39	37. 45
3. 56	37. 25
4. 12	34. 20
4. 25	34. 40
4. 52	34. 40
5. 9	33. 55
5. 26	34. 55
5. 38	34. 10
6. 12	35. 25
6. 56	34. 30
7. 11	33. 0
7. 33	34. 30
8. 2	34. 30
8. 44	32. 30
9. 9	33. 30
9. 18	31. 20
9. 43	32. 30
10. 11	31. 20
10. 58	33. 5
12. 26	31. 55
12. 39	31. 35
13. 28	32. 5
13. 41	31. 30
14. 11	31. 55
14. 30	30. 30
14. 42	32. 5
14. 55	31. 50
15. 8	33. 0
15. 23	33. 20
15. 26	36. 0
15. 43	35. 10
15. 59	35. 15
16. 9	34. 35
16. 26	33. 10
16. 43	31. 25
17. 6	32. 0
17. 24	29. 30
17. 35	30. 5
17. 42	30. 0
18. 11	31. 55
18. 23	31. 20
18. 39	33. 10

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
July 25	
	(†)
1. 0	·1357
2. 36	·1381
2. 50	·1376
3. 24	·1382
3. 56	·1364
4. 20	·1371
4. 43	·1366
4. 56	·1369
5. 30	·1362
5. 49	·1367
5. 55	·1365
6. 2	·1370
6. 31	·1363
6. 54	·1365
7. 19	·1373
8. 5	·1369
8. 17	·1371
8. 40	·1368
8. 47	·1369
9. 4	·1366
9. 21	·1368
9. 52	·1367
	***
12. 57	·1373
13. 19	·1371
13. 42	·1375
13. 52	·1371
13. 58	·1374
15. 0	·1374
15. 22	·1370
17. 5	·1370
17. 12	·1373
17. 28	·1368
18. 5	·1371
18. 30	·1365
18. 42	·1364
19. 12	·1350
20. 3	·1365
20. 49	·1359
21. 50	·1361
22. 25	·1357
22. 42	·1350
22. 51	·1357
23. 14	·1350
	(†)

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
July 25	
0. 0	·03051
1. 38	{·03095 ·03137
4. 30	·03218
4. 39	{·03218 ·03191
5. 42	·03192
7. 4	·03176
9. 30	·03163
10. 12	·03136
11. 35	·03106
14. 43	·03066
17. 7	·03050
18. 56	·03021
20. 11	·03024
20. 40	·03032
21. 13	·03018
22. 7	·03051
22. 38	·03065
23. 59	·03092

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
July 25		
1. 0	69 ·8	70 ·5
3. 0	69 ·6	70 ·8
Max.	71 ·0	71 ·3
9. 0	69 ·1	70 ·2
Min.	65 ·3	66 ·5
21. 0	66 ·6	68 ·0
22. 0	67 ·5	68 ·7
23. 8	68 ·2	69 ·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

July 24^{d}. 22^{h}. 3^{m}. to July 25^{d}. 1^{h}. 0^{m}. Damper experiments with the Horizontal Force Magnet were in progress.

July 25^{d}. 1^{h}. 45^{m}. to 3^{h}. 10^{m}. Damper experiments with the Declination Magnet were in progress.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 25								
h m	° ′ ″	h m		h m		h m	°	°
18. 44	20. 32. 25							
19. 8	32. 25							
19. 29	33. 35							
19. 59	32. 30							
	***							
21. 8	33. 10							
21. 53	34. 30							
22. 26	37. 0							
22. 37	37. 0							
22. 56	39. 40							
23. 47	42. 30							
23. 59	42. 5							
July 26		July 26		July 26		July 26		
0. 0	20. 42. 5		(†)	0. 0	·03092	0. 0	68·5	69·2
0. 9	42. 15	0. 11	·1365	2. 7	·03142	1. 0	68·5	69·7
0. 38	41. 30	1. 14	·1369	3. 21	·03139	2. 10	68·5	69·7
0. 53	42. 15	1. 26	·1359	6. 39	·03167	3. 0	68·5	69·9
1. 1	41. 50	1. 31	·1364	6. 53	·03158	Max.	69·7	70·9
1. 38	42. 30	1. 40	·1362	7. 11	·03171	9. 0	66·0	68·0
2. 8	39. 50	2. 19	·1381	7. 45	·03162	Min.	59·8	61·7
2. 33	39. 15	3. 16	·1379	8. 40	·03151	21. 0	64·1	66·0
4. 11	39. 10	3. 27	·1381	13. 46	·02967	22. 0	64·6	66. 1
4. 28	38. 0	3. 40	·1378	13. 59	·02962	23. 0	64·8	67·0
4. 47	38. 40	4. 3	·1381	15. 30:	·02891			
5. 23	37. 25	4. 33	·1374	16. 22	·02882			
5. 41	37. 20	5. 0	·1377	17. 30	·02835			
5. 48	36. 50	5. 4	·1374	18. 34	·02831			
6. 12	37. 25	5. 14	·1368	20. 26	·02843			
6. 37	36. 30	5. 52	·1367	21. 19	·02864			
6. 41	36. 55	6. 28:	·1385		(†)			
6. 56	27. 35	6. 49	·1371					
7. 11	31. 0	7. 3	·1391					
7. 34	31. 35	7. 25	·1376					
7. 43	33. 30	7. 40	·1377					
8. 8	33. 10	7. 46	·1371					
8. 24	35. 5	8. 6	·1369					
8. 56	35. 45	9. 39	·1377					
9. 33	35. 20	11. 32	·1379					
10. 11	36. 0	12. 58	·1381					
10. 25	35. 10	14. 3	·1389					
10. 41	35. 40	14. 52	·1388					
10. 54	34. 55	15. 44	·1379					
11. 46	35. 45	17. 13	·1383					
12. 8	33. 40	18. 13	·1375					
12. 43	34. 5	18. 35	·1379					
12. 54	34. 30	19. 32	·1369					
13. 9	35. 50	19. 54	·1362					
13. 14	35. 50	20. 30	·1361					
13. 24	34. 55	21. 2	·1364					
13. 52	39. 0	21. 42	·1358					
14. 8	38. 15	22. 20	·1366					
14. 12	36. 25	22. 48	·1364					
14. 25	37. 55	23. 48	·1367					
14. 41	36. 0		(†)					
15. 9	31. 40							
15. 41	30. 55							
16. 7	31. 35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 26								
h m	° ′ ″	h m		h m		h m	°	°
16. 55	20. 30. 5							
17. 37	29. 50							
17. 58	30. 20							
18. 16	28. 55							
18. 39	31. 10							
18. 53	31. 20							
19. 52	34. 10							
20. 25	36. 15							
21. 8	36. 35							
21. 30	34. 45							
	(†)							
23. 26	37. 35							
23. 59	39. 50							
July 27		July 27		July 27		July 27		
0. 0	20. 39. 50		(†)		(†)	0. 0	65·7	67·0
2. 30	38. 5	0. 33	·1363	1. 0	·02981*	1. 0	65·7	68·0
2. 43	38. 25	1. 11	·1361	2. 25	·02975	2. 0	66·7	68·2
3. 11	37. 10	2. 34	·1370	4. 16	·03011	3. 0	66·7	69·0
3. 26	37. 20	2. 45	·1373	6. 54	·03040	Max.	68·1	70·0
3. 43	36. 30	3. 19	·1363	8. 54	·03053	9. 0	67·5	68·8
5. 0	36. 0	3. 33	·1372	13. 0	·02977	Min.	62·3	63·3
5. 56	33. 45	3. 48	·1370	18. 33	·02881	21. 0	63·8	65·0
7. 11	34. 5	3. 57	·1374	19. 27	·02884			
10. 39	33. 45	4. 18	·1371	22. 14	·02837			
10. 56	34. 10	4. 36	·1375	23. 59	·02849			
11. 38	33. 45	5. 12	·1373					
11. 58	33. 40	5. 40	·1375					
12. 18	32. 25	5. 56	·1382					
13. 44	32. 0	6. 44	·1380					
13. 56	32. 30	7. 4	·1382					
15. 9	32. 30	7. 26	·1379					
15. 45:	33. 10	9. 12	·1373					
16. 37	31. 15	9. 43	·1373					
17. 13	29. 50	10. 14	·1369					
17. 52	30. 0	10. 44	·1372					
18. 11	29. 25	11. 35	·1369					
19. 56	30. 0	12. 26	·1377					
23. 59	39. 0	13. 40	·1371					
		15. 8	·1374					
		15. 26	·1372					
		16. 46	·1376					
		19. 40	·1370					
		21. 18	·1359					
		21. 49	·1358					
		23. 59	·1368					
July 28		July 28		July 28		July 28		
0. 0	20. 39. 0	0. 0	·1368	0. 0	·02849	1. 0	65·6	66·4
1. 27	39. 30	0. 50	·1370	2. 33	·02910	3. 0	66·0	67·5
2. 44	37. 10	1. 45	·1369	7. 41	·02967	Max.	67·9	68·1
3. 36	36. 25	2. 26	·1366	8. 54	·02967	9. 0	65·6	67·0
6. 30	35. 30	3. 6	·1367	11. 55	·02881	Min.	61·2	62·3
6. 45	36. 10	3. 17	·1369	13. 39	·02869	21. 0	63·5	64·8
7. 9	34. 0	3. 37	·1368	15. 56	·02823			
7. 56	35. 0	4. 21	·1369	18. 47	·02793			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

July 26d. 21h. 30m to 23h. 24m. Damper experiments with the Declination Magnet were in progress.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 28		July 28		July 28				
h m	° ′ ″	h m		h m		h m	°	°
8. 28	20. 36. 0	4. 42	·1375	20. 56	·02794			
8. 56	35. 0	6. 18	·1383	22. 58	·02821			
9. 35	35. 20	6. 52	·1378	23. 59	·02832			
10. 42	34. 30	7. 23	·1379					
10. 58	33. 10	7. 47	·1382					
11. 11	34. 35	9. 26	·1377					
11. 25	32. 30	9. 58	·1380					
11. 41	31. 30	10. 26	·1378					
12. 3	32. 30	10. 38	·1383					
12. 26	32. 50	10. 52	·1380					
12. 39	32. 5	11. 3	·1383					
13. 11	33. 0	11. 20	·1378					
15. 4	32. 55	12. 25	·1380					
15. 36	32. 0	14. 48	·1388					
15. 45	32. 0	16. 52	·1383					
16. 11	30. 40	17. 26	·1384					
17. 41	28. 40	18. 35	·1377					
18. 40	28. 15	21. 59	·1367					
18. 57	29. 0	22. 12	·1369					
19. 53	29. 40	23. 2	·1364					
21. 40	33. 35	23. 59	·1370					
	(†)							
23. 55	37. 0							
23. 59	37. 35							
July 29		July 29		July 29		July 29		
0. 0	20. 37. 35	0. 0	·1370	0. 0	·02832	1. 0	65·0	66·5
1. 8	39. 25	1. 32	·1363	5. 13	·02912	3. 0	65·6	67·2
1. 43	38. 15	2. 40	·1377	5. 33	·02930	Max.	66·8	68·4
2. 36	37. 45	3. 12	·1378	5. 58	·02922	9. 0	65·9	67·2
3. 8	37. 0	3. 30	·1385	9. 3	·02957	Min.	63·8	65·2
3. 23	37. 20	3. 52	·1381	11. 24	·02917	22. 30	65·0	66·5
4. 7	36. 40	3. 57	·1383	15. 27	·02883			
4. 12	35. 50	4. 9	·1376	18. 26	·02892			
4. 25	35. 50	4. 35	·1389	20. 26	·02893			
4. 34	36. 25	4. 40	·1386	23. 59	·02865			
4. 41	35. 45	4. 57	·1391					
4. 49	35. 55	5. 24	·1377					
5. 18	34. 25	5. 34	·1385					
5. 25	35. 30	5. 38	·1384					
5. 37	35. 45	5. 56	·1364					
6. 0	34. 25	6. 34	·1379					
6. 25	33. 30	7. 23	·1382					
6. 45	34. 35	9. 19	·1381					
7. 5	34. 55	9. 35	·1387					
7. 14	34. 30	9. 46	·1384					
7. 56	35. 5	10. 12	·1387					
8. 26	33. 50	10. 18	·1386					
9. 8	33. 25	10. 37	·1387					
9. 28	33. 40	11. 12	·1382					
9. 42	34. 5	11. 27	·1385					
9. 58	34. 5	11. 41	·1380					
10. 25	33. 0							
10. 41	33. 10	13. 8	·1383					
10. 53	32. 30	13. 19	·1380					
11. 9	32. 35	13. 41	·1383					
11. 14	31. 55	14. 8	·1384					
11. 33	32. 35	14. 54	·1380					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 29		July 29						
h m	° ′ ″	h m		h m		h m	°	°
11. 46	20. 31. 10	15. 11	·1385					
12. 7	31. 30	16. 48	·1384					
12. 26	31. 15	17. 11	·1379					
12. 40	32. 10	17. 24	·1384					
12. 58	31. 35	17. 49	·1384					
13. 16	29. 30	19. 27	·1371					
14. 26	31. 10	21. 39	·1368					
14. 42	33. 30	22. 10	·1364					
15. 10	33. 40	22. 44	·1373					
15. 43	30. 55	23. 10	·1370					
16. 49	28. 50	23. 15	·1372					
16. 57	28. 50	23. 25	·1367					
17. 8	28. 10	23. 40	·1368					
17. 14	29. 0	23. 59	·1359					
17. 26	28. 5							
17. 40	28. 50							
17. 45	28. 10							
18. 9	28. 50							
18. 15	27. 55							
18. 27	28. 30							
18. 42	27. 55							
19. 16	28. 50							
19. 55	29. 30							
20. 13	30. 50							
20. 43	31. 5							
21. 9	30. 30							
21. 26	32. 0							
21. 43	32. 30							
23. 13	38. 0							
23. 59	40. 30							
July 30		July 30		July 30		July 30		
0. 0	20. 40. 30	0. 0	·1359	0. 0	·02865	1. 0	65·6	66·1
0. 22	41. 30	0. 12	·1363	4. 57	·02938	Max.	66·4	67·8
0. 34	41. 5	0. 23	·1359	6. 39	·02952	8. 0	64·8	66·4
0. 59	41. 30	0. 42	·1371	11. 51	·02846	Min.	60·5	61·0
1. 11	40. 35	1. 14	·1363	13. 31	·02789	21. 0	63·4	64·2
1. 29	40. 25	1. 24	·1367	16. 8	·02737			
2. 12	37. 50	1. 52	·1365	16. 54	·02731			
2. 43	37. 35	2. 32	·1376	21. 56	·02759			
2. 58	37. 55	2. 45	·1379	23. 59	·02777			
3. 28	36. 50	2. 59	·1385					
4. 29	36. 15	3. 22	·1382					
5. 9	36. 20	4. 10	·1384					
5. 34	35. 5	4. 34	·1381					
6. 9	34. 35	5. 10	·1386					
6. 56	34. 15	5. 40	·1380					
7. 16	34. 25	6. 41	·1386					
9. 59	32. 30	6. 51	·1384					
10. 14	31. 30	8. 1	·1387					
10. 45	32. 5	8. 34	·1381					
11. 30	30. 45	9. 14	·1384					
13. 7	31. 30	12. 8	·1380					
13. 41	30. 20	13. 13	·1386					
14. 29	29. 50	14. 22	·1384					
14. 52	30. 20	16. 24	·1384					
15. 12	29. 40	20. 45	·1372					
16. 24	29. 30	21. 19	·1376					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

July 28, Damper experiments with the Declination Magnet were in progress from 21^{h}. 40^{m}. to 23^{h}. 50^{m}.

DECLINATION MAGNET.—Damper experiments were made between July 30^{d}. 21^{h}. 45^{m}. and July 31^{d}. 0^{h}. 15^{m}., and also from 31^{d}. 21^{h}. 45^{m}. to 31^{d}. 23^{h}. 59^{m}.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 30		July 30						
h m	° ′ ″	h m		h m		h m	°	°
16. 41	20. 31. 30	21. 48	·1374					
16. 59	31. 15	22. 49	·1379					
17. 38	30. 50	23. 34	·1376					
17. 55	31. 30	23. 59	·1380					
18. 3	30. 50							
19. 4	31. 50							
19. 16	31. 10							
20. 26	32. 5							
21. 45	34. 30							
	(†)							
July 31		July 31		July 31		July 31		
	(†)	0. 0	·1380	0. 0	·02777	1. 0	64·4	66·0
0. 17	20. 37. 35	0. 27	·1379	3. 2	·02831	3. 0	64·9	66·3
1. 0	38. 30	1. 18	·1375	8. 59	·02862	Max.	65·2	66·3
1. 41	37. 30	1. 28	·1378	10. 46	·02813	9. 0	63·7	65·0
2. 9	37. 40	1. 40	·1377	13. 34	·02784	Min.	61·5	62·4
2. 58	35. 50	2. 15	·1387	16. 56	·02764	21. 0	62·4	63·8
3. 57	34. 30	2. 53	·1383	19. 11	·02782			
4. 56	34. 30	3. 0	·1386	22. 33	·02720			
5. 13	33. 50	3. 14	·1384	23. 59	·02683			
5. 33	34. 10	3. 55	·1386					
5. 54	33. 50	4. 56	·1391					
6. 24	33. 50	5. 3	·1387					
6. 39	33. 20	5. 8	·1390					
7. 27	33. 45	5. 18	·1388					
8. 18	33. 30	5. 37	·1391					
8. 44	32. 30	5. 46	·1388					
9. 29	32. 30	6. 19	·1387					
9. 43	32. 40	6. 32	·1384					
10. 6	32. 20	6. 41	·1385					
11. 29	32. 15	6. 48	·1384					
14. 41	30. 45	7. 52	·1384					
15. 8	31. 10	8. 12	·1387					
15. 56	30. 10	8. 37	·1384					
16. 46	30. 0	9. 20	·1387					
17. 13	29. 5	9. 36	·1389					
17. 43	29. 35	14. 35	·1384					
18. 44	29. 20	14. 49	·1387					
19. 58	30. 10	16. 43	·1387					
21. 45	33. 30	17. 14	·1385					
	(†)	18. 9	·1386					
23. 59	34. 30	20. 12	·1382					
		21. 43	·1375					
		22. 52	·1384					
		23. 59	·1381					
Aug. 1		Aug. 1		Aug. 1		Aug. 1		
0. 0	20. 34. 30	0. 0	·1381	0. 0	·02683	1. 0	61·7	63·0
1. 38	36. 35	1. 0	·1384	2. 27	·02729	3. 0	61·8	63·0
2. 28	35. 40	2. 39	·1377	6. 48	·02718	Max.	63·2	64·3
2. 38	35. 0	3. 19	·1385	8. 28	·02722	9. 0	60·0	62·0
4. 46	31. 40	3. 49	·1386	11. 31	·02675	Min.	60·0	61·3
5. 24	31. 20	4. 12	·1391	18. 38	·02676	21. 0	61·6	62·7
5. 53	32. 5	4. 46	·1388	21. 56	·02662	22. 0	60·4	60·7
6. 44	33. 20	6. 4	·1396	22. 59	·02610	23. 30	61·2	61·8
7. 38	33. 35	6. 22	·1396	23. 59	·02618			
8. 15	32. 50	7. 25	·1405					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 1		Aug. 1						
h m	° ′ ″	h m		h m		h m	°	°
8. 57	20. 33. 20	8. 20	·1399					
9. 26	32. 30	8. 48	·1398					
9. 32	32. 50	9. 7	·1400					
9. 43	32. 5	9. 19	·1397					
10. 14	32. 40	9. 54	·1399					
10. 26	32. 25	10. 10	·1398					
11. 7	32. 0	11. 14	·1401					
11. 55	32. 30	12. 0	·1398					
12. 0	33. 5	12. 23	·1403					
12. 11	31. 50	13. 9	·1399					
12. 19	32. 5	13. 25	·1402					
12. 30	31. 10	13. 55	·1404					
13. 7	31. 15	14. 38	·1396					
13. 28	32. 30	14. 56	·1393					
13. 46	31. 10	15. 14	·1386					
13. 58	31. 0	15. 44	·1392					
14. 12	29. 35	16. 3	·1389					
14. 26	28. 50	16. 30	·1394					
15. 0	29. 5	17. 33	·1389					
15. 44	30. 55	18. 22	·1389					
16. 8	29. 35	19. 40	·1383					
16. 14	29. 35	19. 46	·1385					
16. 43	28. 10	20. 20	·1381					
16. 56	28. 10	20. 51	·1389					
17. 8	27. 30	21. 26	·1384					
17. 17	28. 10	22. 45	·1389					
17. 44	27. 0	22. 59	·1392					
18. 3	26. 40	23. 6	·1391					
18. 33	27. 30	23. 35	·1402					
18. 42	27. 0	23. 42	·1396					
19. 23	27. 0	23. 59	·1404					
19. 42	28. 10							
19. 56	27. 55							
20. 13	29. 5							
20. 25	28. 40							
20. 57	31. 35							
21. 35	31. 50							
	(†)							
Aug. 2		Aug. 2		Aug. 2		Aug. 2		
	(†)	0. 0	·1404	0. 0	·02618	0. 0	61·2	61·2
0. 20	20. 39. 35	0. 16	·1411	2. 2	·02678	1. 0	61·8	63·0
0. 38	42. 35	0. 25	·1399	3. 43	·02738	2. 0	62·1	63·4
0. 43	40. 25	0. 39	·1418	4. 48	·02736	3. 0	62·1	63·7
0. 57	39. 55	0. 56	·1390	5. 39	·02715	Max.	62·3	63·7
1. 11	41. 30	1. 5	·1402	5. 46	·02752	9. 0	60·8	62·3
1. 41	41. 20	1. 34	·1404	5. 54	·02700	21. 0	60·5	62·0
1. 49	42. 30	1. 41	·1398	6. 4	·02723	22. 20	57·9	59·6
1. 56	42. 50	1. 55	·1408	6. 7	·02702	23. 0	57·4	58·7
2. 11	43. 25	1. 58	·1407	6. 18	·02732	Min.	57·4	58·7
2. 18	42. 55	2. 15	·1418	6. 23	·02717			
2. 34	44. 10	2. 23	·1416	6. 27	·02748			
2. 42	43. 45	2. 28	·1419	6. 43	·02605			
2. 53	43. 45	2. 38	·1424	6. 54	·02674			
2. 56	43. 5	2. 50	·1426	6. 58	·02542			
3. 2	43. 20	3. 5	·1416	7. 0	·02553			
3. 11	41. 55	3. 11	·1420	7. 8	·02521			
3. 25	43. 0	3. 13	·1415	7. 16	·02522			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

August 1^{d}. 21^{h}. 35^{m} to August 2^{d}. 0^{h}. 15^{m}. Damper experiments with the Declination Magnet were in progress.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 2		Aug. 2		Aug. 2				
h m	° ′ ″	h m		h m		h m	°	°
3. 33	20. 40. 50	3. 19	·1416	7. 22	·02526			
3. 41	38. 40	3. 22	·1414	7. 29	·02570			
3. 53	40. 20	3. 25	·1415	7. 35	·02637			
3. 59	38. 30	3. 30	·1413	7. 39	·02578			
4. 11	39. 0	3. 38	·1417	7. 46	·02729			
4. 20	37. 25	3. 43	·1414	7. 54	·02518			
4. 43	38. 55	3. 46	·1425	7. 56	·02609			
4. 55	40. 40	3. 51	·1422	7. 59	·02609			
5. 4	41. 50	3. 57	·1429	8. 11	·02864			
5. 12	40. 5	4. 10	·1399	8. 14	·02798			
5. 32	40. 45	4. 16	·1383	8. 19	·02807			
5. 53	40. 20	4. 36	·1394	8. 26	·02752			
5. 56	45. 10	4. 42	·1393	8. 41	·02789			
6. 8	41. 0	4. 53	·1407	9. 49	·02661			
6. 12	45. 0	4. 55	·1406		***			
6. 14	39. 40	5. 7	·1420	10. 48	·02696			
6. 24	40. 55	5. 12	·1411	11. 1	·02682			
6. 27	36. 5	5. 18	·1411	11. 9	·02688			
6. 35	37. 40	5. 24	·1406	11. 31	·02639			
6. 42	28. 50	5. 34	·1408	11. 54	·02638			
6. 56	40. 40	5. 48	·1403	12. 9	·02572			
7. 0	39. 15	5. 56	·1429	12. 13	·02579			
7. 8	27. 0	6. 4	·1401	12. 22	·02543			
7. 16	42. 15	6. 19	·1430	12. 43	·02557			
7. 23	31. 55	6. 43	·1524	12. 59	·02468			
7. 43	46. 30	6. 49	·1476	13. 6	·02437			
7. 45	51. 10	6. 59	·1406	13. 11	·02359			
7. 54	26. 15	7. 4	·1416	13. 16	·02326			
8. 3	55. 50	7. 10	·1374	13. 23	·02265			
8. 8	51. 20	7. 18	·1365	13. 32	·02155			
8. 14	27. 10	7. 36	·1420	13. 38	·02141			
8. 20	23. 10	7. 45	·1437	14. 0	·02400			
8. 29	30. 10	7. 46	·1390	14. 9	·02432			
8. 38	29. 30	8. 0	·1441	14. 22	·02406			
8. 43	30. 5	8. 10	·1382	15. 3:	·02576			
8. 56	29. 10	8. 19	·1409	15. 31:	·02632			
9. 11	29. 35	8. 21	·1404	16. 28	·02682			
9. 14	28. 5	8. 30	·1409	16. 55	·02671			
9. 23	26. 35	8. 39	·1394	16. 59	·02660			
9. 33	28. 30	8. 46	·1384	17. 3	·02684			
9. 39	21. 20	8. 51	·1370		***			
9. 56	27. 55	9. 5	·1365	17. 36	·02663			
10. 9	30. 40	9. 10	·1365	17. 38	·02704			
10. 23	27. 30	9. 12	·1357	17. 42	·02642			
10. 29	27. 40	9. 16	·1358	17. 54	·02693			
10. 36	25. 40	9. 24	·1356	17. 57	·02618			
10. 42	27. 35	9. 40	·1365	18. 2	·02581			
10. 53	26. 20	9. 46	·1362		***			
10. 58	27. 25	9. 56	·1368	18. 24	·02575			
11. 8	27. 25	10. 2	·1362	18. 36	·02504			
11. 21	30. 30	10. 5	·1364	18. 59	·02583			
11. 42	28. 0	10. 14	·1359	19. 33	·02518			
11. 56	28. 50	10. 19	·1365		***			
12. 2	35. 5	10. 23	·1364	20. 9	·02511			
12. 10	30. 10	10. 33	·1378	20. 18	·02469			
12. 23	26. 5	10. 41	·1365	20. 31	·02511			
12. 28	29. 5	10. 44	·1368	20. 39	·02371			
12. 37	29. 5	10. 52	·1366		(†)			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 2		Aug. 2		Aug. 2				
h m	° ′ ″	h m		h m		h m	°	°
12. 54	20. 34. 10	10. 56	·1372	21. 0	·02646*			
13. 5	33. 10	11. 5	·1368	21. 42	·02600			
13. 11	35. 5	11. 12	·1371	22. 1	·02669			
13. 18	40. 30	11. 22	·1368		***			
13. 26	41. 25	11. 41	·1363	22. 23	·02669			
13. 28	42. 50	11. 49	·1365	22. 32	·02717			
13. 46	34. 30	12. 6	·1385	22. 56	·02723			
13. 54	31. 10	12. 9	·1375		***			
13. 57	31. 10	12. 15	·1387	23. 14	·02667			
14. 13	43. 20	12. 25	·1378		***			
14. 26	36. 0	12. 32	·1382	23. 44	·02640			
14. 31	36. 10	12. 41	·1368	23. 59	·02670			
14. 43	30. 0	13. 10	·1328					
15. 17	28. 0	13. 12	·1331					
15. 33	28. 30	13. 19	·1309					
15. 53	28. 0	13. 29	·1299					
16. 2	29. 5	13. 50	·1250					
16. 25	27. 30	14. 19	·1314					
16. 28	25. 5	14. 25	·1326					
16. 33	30. 25	14. 40	·1353					
16. 45	24. 0	15. 4	·1364					
16. 58	21. 30	15. 13	·1362					
17. 4	18. 5	15. 27	·1366					
17. 11	29. 30	15. 38	·1364					
17. 12	26. 30	15. 56	·1369					
17. 19	23. 0	16. 4	·1366					
17. 21	18. 25	16. 20	·1367					
17. 27	27. 50	16. 24	·1364					
17. 28	22. 10	16. 33	·1371					
17. 32	18. 35	16. 41	·1369					
17. 34	22. 10	17. 9	·1383					
17. 41	16. 20	17. 14	·1370					
17. 45	25. 50	17. 26	·1383					
17. 51	12. 30	17. 32	·1377					
17. 59	38. 30	17. 42	·1381					
18. 3	28. 25	17. 44	·1365					
18. 7	23. 30	17. 48	·1385					
18. 12	25. 0	17. 52	·1368					
18. 24	43. 10	17. 56	·1413					
18. 26	32. 0	18. 8	·1300					
18. 28	43. 10	18. 24	·1328					
18. 29	35. 50	18. 26	·1347					
18. 34	37. 55	18. 28	·1325					
18. 36	16. 10	18. 35	·1330					
18. 43	8. 5	18. 43	·1299					
18. 59	22. 10	18. 52	·1338					
19. 11	25. 55	19. 6	·1386					
19. 14	33. 0	19. 19	·1329					
19. 29	38. 40	19. 40	·1252					
19. 40	27. 50		(†)					
19. 42	40. 10	21. 0	·1254*					
19. 45	31. 15	21. 1	·1267					
19. 46	13. 35	21. 8	·1248					
20. 0	50. 0		(†)					
20. 2	46. 0	21. 20	·1320					
20. 7	51. 30	21. 26	·1248					
20. 10	22. 40	21. 40	·1254					
20. 13	19. 30		(†)					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 2		Aug. 2						
h m	° ′ ″	h m		h m		h m	°	°
20. 15	20. 15. 15	22. 22	·1250					
20. 28	37. 10	22. 39	·1300					
20. 29	27. 30	22. 42	·1291					
20. 38	28. 55	22. 48	·1302					
20. 43	3. 50	22. 53	·1296					
21. 0	54. 0	23. 16	·1346					
21. 9	24. 5	23. 25	·1326					
21. 24	51. 30	23. 41	·1359					
21. 26	46. 10	23. 46	·1345					
21. 29	42. 10	23. 59	·1366					
21. 34	40. 10							
21. 39	37. 15							
21. 40	34. 10							
21. 43	31. 5							
21. 45	20. 7. 15							
22. 11	21. 1. 0							
22. 13	20. 47. 50							
22. 25	59. 5							
22. 26	30. 0							
22. 43	59. 20							
22. 44	43. 25							
22. 57	59. 45							
22. 58	45. 0							
22. 59	46. 40							
23. 0	33. 35							
23. 8	52. 0							
23. 10	45. 30							
	* * *							
23. 42	38. 15							
23. 47	44. 10							
23. 54	40. 50							
23. 55	44. 30							
23. 57	44. 0							
23. 59	44. 35							
Aug. 3		Aug. 3		Aug. 3		Aug. 3		
0. 0	20. 44. 35	0. 0	·1366	0. 0	·02670	Min.	58·8	59·5
0. 11	47. 0	0. 11	·1341	0. 28	·02858	0. 0	58·8	59·5
0. 20	42. 30	0. 21	·1365	0. 46	·02886	1. 0	59·8	61·0
0. 27	37. 30	0. 25	·1358	0. 59	·02809	2. 0	60·3	61·6
0. 46	49. 40	0. 34	·1374	1. 24	·02898	3. 0	60·7	61·4
0. 56	20. 47. 5		(†)	1. 56	·02928	Max.	61·5	62·7
1. 11	21. 5. 0	1. 0	·1361*	2. 16	·02969	9. 0	59·6	61·2
1. 12	20. 55. 50	3. 0	·1415*	2. 41	·02923	Min.	59·4	60·5
1. 17	48. 45	3. 19	·1420	3. 3	·03151	21. 0	59·7	61·0
1. 25	50. 5	3. 21	·1316	3. 17	·02972			
1. 30	57. 35		(†)	3. 48	·02949			
1. 42	40. 50	4. 4	·1466	4. 13	·02908			
1. 46	38. 40	4. 8	·1476	4. 19	·02867			
2. 7	50. 30		(†)	4. 28	·02910			
2. 12	20. 59. 10	4. 30	·1460	4. 36	·02851			
2. 17	21. 2. 5	4. 38	·1489	5. 4	·02789			
2. 24	20. 59. 5	4. 43	·1440	5. 12	·02733			
2. 26	21. 2. 5	4. 56	·1460	5. 18	·02765			
2. 30	21. 6. 5	5. 4	·1454	5. 24	·02753			
2. 38	20. 39. 50	5. 7	·1462	5. 27	·02776			
2. 41	50. 10	5. 18	·1449	5. 34	·02750			
2. 44	48. 5	5. 21	·1467	5. 39	·02704			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 3		Aug. 3		Aug. 3				
h m	° ′ ″	h m		h m		h m	°	°
2. 50	20. 52. 50	5. 34	·1444	5. 47	·02733			
2. 58	49. 50	5. 40	·1441	5. 57	·02686			
3. 7	52. 20	5. 55	·1354	6. 6	·02704			
3. 11	48. 10	6. 10	·1421	6. 15	·02668			
3. 13	51. 10	6. 18	·1362	6. 33	·02677			
3. 15	49. 15	6. 25	·1386	6. 46	·02744			
3. 26	55. 35	6. 44	·1398	6. 54	·02753			
3. 31	52. 10	6. 48	·1406	7. 12	·02771			
3. 38	43. 25	7. 7	·1390	7. 22	·02736			
3. 39	20. 32. 30	7. 16	·1362	7. 25	·02762			
3. 50	21. 12. 0	7. 40	·1342	7. 35	·02700			
3. 57	20. 17. 10	7. 48	·1354	7. 39	·02713			
4. 10	30. 5	7. 59	·1351	7. 40	·02641			
4. 15	37. 15	8. 12	·1368	7. 43	·02656			
4. 24	51. 20	8. 21	·1409	7. 54	·02597			
4. 26	44. 0	8. 39	·1336	8. 0	·02649			
4. 28	46. 20	8. 50	·1346	8. 11	·02603			
4. 31	34. 5	9. 3	·1338	8. 14	·02629			
4. 35	41. 10	9. 20	·1334	8. 21	·02622			
4. 41	45. 0	9. 31	·1354	8. 29	·02653			
4. 44	49. 25	9. 42	·1337	8. 37	·02660			
4. 54	34. 10	9. 49	·1343	8. 48	·02688			
4. 57	34. 30	10. 3	·1338		(†)			
4. 59	31. 45	10. 11	·1342	9. 0	·02684*			
5. 0	34. 55	10. 21	·1334	10. 18	·02709			
5. 7	32. 40	10. 25	·1317	10. 34	·02709			
5. 9	38. 50	10. 28	·1326	10. 53	·02667			
5. 12	25. 10	10. 35	·1325	11. 6	·02671			
5. 22	0. 30	10. 42	·1355	11. 21	·02649			
5. 29	36. 0	10. 48	·1343	11. 53	·02649			
5. 31	42. 5	10. 59	·1377	12. 3	·02638			
5. 33	48. 50	11. 7	·1379	12. 12	·02647			
5. 38	42. 55	11. 17	·1343	12. 46	·02629			
5. 40	35. 5	11. 25	·1362	13. 11	·02665			
5. 46	31. 10	11. 40	·1356	13. 38	·02671			
5. 53	36. 10	11. 44	·1348	15. 1	·02705			
5. 55	27. 40	11. 49	·1356	15. 31	·02700			
5. 57	18. 50	12. 2	·1355	15. 44	·02688			
6. 6	33. 0	12. 11	·1351	15. 59	·02688			
6. 9	21. 10	12. 23	·1335	16. 14	·02698			
6. 17	37. 55	12. 36	·1352	16. 46	·02723			
6. 22	15. 5	12. 41	·1350	17. 13	·02721			
6. 27	29. 50	12. 54	·1366	18. 10	·02752			
6. 29	24. 10	13. 11	·1363	20. 5	·02769			
6. 41	39. 5	13. 22	·1368	20. 33	·02758			
6. 42	24. 50	13. 34	·1363	22. 4	·02721			
6. 45	30. 45	13. 57	·1354	23. 16	·02703			
6. 53	25. 15	14. 11	·1359	23. 59	·02729			
6. 57	32. 0	14. 45	·1360					
7. 2	13. 50	14. 55	·1357					
7. 8	18. 10	15. 11	·1360					
7. 10	17. 10	15. 17	·1358					
7. 24	26. 50	15. 19	·1361					
7. 26	25. 10	15. 35	·1349					
7. 29	27. 5	15. 44	·1326					
7. 39	20. 21. 0	16. 2	·1315					
7. 49	19. 53. 35	16. 7	·1325					
7. 59	20. 32. 5	16. 11	·1325					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Aug. 3		Aug. 3						
h m	° ′ ″	h m		h m		h m	°	°
8. 7	20. 32. 5	16. 19	·1339					
8. 9	34. 30	16. 32	·1342					
8. 13	30. 20	16. 43	·1344					
8. 14	18. 10	17. 0	·1351					
8. 19	15. 50	17. 8	·1350					
8. 26	30. 45	17. 11	·1352					
8. 30	17. 0	17. 19	·1351					
8. 34	22. 0	17. 24	·1353					
8. 39	13. 30	17. 37	·1349					
8. 50	19. 20	17. 42	·1351					
8. 53	17. 5	18. 1	·1346					
8. 58	19. 10	18. 16	·1350					
9. 3	16. 55	18. 32	·1345					
9. 13	23. 0	18. 41	·1347					
9. 38	29. 40	19. 0	·1348					
9. 42	27. 30	19. 10	·1350					
9. 54	28. 0	19. 27	·1347					
9. 59	27. 25	19. 40	·1351					
10. 7	0. 10	20. 21	·1354					
10. 10	4. 10	20. 41	·1353					
10. 18	5. 5	21. 12	·1344					
10. 24	12. 50	21. 36	·1347					
10. 27	15. 5	21. 51	·1344					
10. 32	5. 5	22. 1	·1347					
10. 58	25. 10	22. 12	·1344					
11. 8	17. 0	22. 28	·1346					
11. 9	14. 5	22. 45	·1348					
11. 15	19. 0	23. 12	·1353					
11. 25	23. 0	23. 23	·1357					
11. 38	16. 50	23. 26	·1354					
11. 42	18. 30	23. 33	·1354					
11. 45	18. 5	23. 44	·1353					
11. 55	19. 10	23. 49	·1358					
12. 0	21. 50	23. 55	·1356					
12. 7	21. 55	23. 59	·1360					
12. 9	18. 30							
12. 12	18. 35							
12. 14	16. 40							
12. 23	18. 15							
12. 25	18. 15							
12. 36	20. 30							
12. 43	25. 5							
12. 47	22. 10							
12. 58	20. 0							
13. 30	23. 20							
13. 39	24. 35							
13. 54	23. 25							
14. 13	26. 25							
14. 39	26. 35							
	***							
14. 56	26. 5							
15. 5	23. 30							
15. 9	21. 15							
15. 11	23. 25							
15. 25	24. 10							
15. 37	26. 20							
15. 53	33. 0							
16. 7	34. 40							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Aug. 3								
h m	° ′ ″	h m		h m		h m	°	°
16. 9	20. 30. 55							
16. 11	34. 0							
16. 14	34. 10							
16. 23	32. 30							
16. 41	32. 30							
16. 47	31. 30							
16. 57	32. 0							
17. 2	31. 20							
17. 9	31. 20							
17. 22	29. 30							
17. 38	27. 15							
	***							
17. 55	27. 15							
18. 8	27. 0							
18. 22	28. 5							
18. 29	26. 10							
18. 43	26. 10							
18. 55	26. 50							
19. 9	26. 30							
19. 14	27. 5							
19. 30	26. 25							
19. 56	27. 10							
20. 8	28. 0							
20. 38	28. 25							
20. 42	29. 50							
20. 53	28. 40							
20. 58	29. 30							
21. 26	29. 50							
21. 58	29. 30							
22. 16	30. 25							
22. 26	31. 30							
22. 43	31. 20							
23. 26	34. 15							
23. 43	34. 50							
23. 54	35. 5							
23. 59	36. 20							
Aug. 4		Aug. 4		Aug. 4		Aug. 4		
0. 0	20. 36. 20	0. 0	·1360	0. 0	·02729	1. 0	60·8	61·2
0. 11	36. 20	0. 4	·1364	1. 6	·02767	3. 0	61·0	62·0
0. 24	38. 10	0. 12	·1359	3. 1	·02783	Max.	61·7	62·9
0. 38	38. 30	0. 19	·1365	3. 58	·02817	9. 0	58·8	60·7
0. 42	37. 50	0. 40	·1359	4. 41	·02804	Min.	55·4	55·7
1. 10	39. 10	0. 45	·1353	5. 23	·02817	21. 0	58·6	59·8
1. 39	38. 5	0. 55	·1358	5. 39	·02822			
1. 44	37. 0	1. 4	·1357	6. 0	·02846			
1. 53	36. 50	1. 9	·1363	6. 11	·02829			
2. 13	38. 5	1. 15	·1359	7. 6	·02823			
2. 24	37. 30	1. 43	·1366	7. 33	·02801			
2. 28	37. 30	1. 57	·1364	7. 54	·02809			
2. 42	38. 25	2. 23	·1371	8. 6	·02796			
2. 48	38. 35	2. 37	·1369	8. 11	·02823			
3. 40	31. 10	2. 54	·1379	8. 14	·02800			
3. 53	30. 30	2. 56	·1377	8. 23	·02776			
3. 58	32. 0	3. 2	·1378	8. 39	·02757			
4. 8	31. 30	3. 9	·1374	10. 27	·02691			
4. 50	34. 35	3. 15	·1376	10. 42	·02709			
5. 9	32. 35	3. 18	·1372	11. 8	·02642			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Aug. 4		Aug. 4		Aug. 4					Aug. 4		Aug. 4						
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
5. 15	20. 33. 0	3. 21	·1374	11. 17	·02655				16. 8	20. 8. 20	13. 30	·1374					
5. 27	29. 0	3. 32	·1375	11. 37	·02611				16. 25	25. 30	13. 37	·1376					
5. 47	29. 0	3. 47	·1394	12. 18	·02509				16. 30	27. 40	13. 42	·1369					
5. 58	31. 10	4. 4	·1402	12. 32	·02518				16. 39	25. 30	13. 48	·1351					
6. 8	30. 40	4. 6	·1392	12. 53	·02492				16. 42	22. 25	14. 3	·1313					
6. 12	31. 0	4. 13	·1396	13. 6	·02531				16. 54	23. 40	14. 12	·1310					
6. 25	32. 0	4. 34	·1390	13. 31	·02536				17. 1	20. 50	14. 17	·1314					
6. 37	32. 0	4. 41	·1384	13. 57	·02428				17. 8	25. 40	14. 28	·1335					
6. 56	30. 5	4. 48	·1384	14. 0	·02438				17. 12	25. 40	14. 41	·1314					
7. 9	32. 0	5. 0	·1380	14. 10	·02319				17. 14	29. 50	14. 51	·1257					
7. 14	32. 20	5. 7	·1380	14. 28	·02263				17. 25	19. 10	15. 16	·1341					
7. 24	31. 30	5. 16	·1375	14. 33	·02291				17. 34	23. 30	15. 20	·1333					
7. 37	30. 5	5. 20	·1376	14. 46	·02278				17. 38	18. 40	15. 26	·1341					
7. 43	31. 0	5. 31	·1370	14. 58	·02121				17. 41	23. 50	15. 39	·1319					
7. 54	30. 35	5. 40	·1373	15. 1	·01923				17. 47	21. 25	15. 45	·1323					
7. 56	25. 20	5. 57	·1389	15. 18	·02031				18. 8	36. 50	15. 52	·1321					
7. 59	35. 45	6. 6	·1382	15. 22	·02123				18. 10	33. 0	16. 2	·1314					
8. 12	32. 40	6. 19	·1386	15. 28	·02152				18. 12	36. 15	16. 16	·1280					
8. 17	32. 50	6. 39	·1376	15. 31	·02051					***	16. 35	·1319					
8. 24	30. 30	6. 48	·1375	15. 39	·02117				18. 25	22. 15	16. 52	·1306					
8. 29	30. 25	7. 2	·1380	15. 50	·02066				18. 29	25. 45	17. 5	·1329					
8. 41	27. 45	7. 10	·1377	15. 57	·02123				18. 38	33. 30	17. 7	·1318					
8. 56	28. 40	7. 15	·1378	16. 15	·02196				18. 42	36. 50	17. 11	·1326					
9. 11	28. 0	7. 27	·1374	16. 24	·02157				18. 44	34. 0	17. 19	·1306					
9. 22	28. 15	7. 45	·1385	16. 38	·02242				18. 57	38. 5	17. 26	·1275					
9. 28	33. 15	7. 56	·1379	16. 54	·02242				19. 15	23. 0	17. 36	·1303					
9. 43	34. 35	8. 4	·1419	17. 23	·02309				19. 28	33. 10	17. 41	·1280					
9. 57	30. 30	8. 16	·1386	17. 35	·02184				19. 37	37. 25	17. 42	·1316					
10. 8	30. 30	8. 18	·1388	17. 38	·02161				19. 41	38. 0	17. 48	·1286					
10. 10	31. 10	8. 21	·1384	17. 41	·02217				19. 46	37. 35	17. 50	·1318					
10. 14	30. 30	8. 34	·1388	17. 43	·02203				19. 53	34. 25	17. 55	·1308					
10. 23	30. 30	8. 45	·1381	17. 52	·02244					***	18. 3	·1344					
10. 26	29. 15	8. 57	·1383	17. 56	·02229				20. 33	44. 30	18. 6	·1320					
10. 28	29. 15	9. 3	·1378	18. 1	·02271				20. 38	41. 10	18. 12	·1348					
10. 31	30. 50	9. 25	·1374	18. 4	·02255				20. 43	50. 30	18. 22	·1286					
10. 39	28. 30	9. 36	·1376	18. 18	·02326				20. 53	44. 25	18. 27	·1302					
10. 53	22. 10	9. 54	·1369	18. 20	·02358				20. 56	47. 25	18. 34	·1287					
11. 0	14. 10	10. 9	·1378	18. 33	·02318				21. 13	41. 0	18. 40	·1250					
11. 11	19. 40	10. 26	·1374	19. 1	·02363				21. 38	35. 0		(†)					
11. 27	10. 55	10. 35	·1376	19. 18	·02355				21. 41	28. 25	18. 50	·1250					
11. 54	22. 35	10. 39	·1409	19. 41	·02403				21. 54	37. 50	18. 59	·1284					
12. 9	14. 5	10. 42	·1402	20. 1	·02397				21. 58	34. 15	19. 12	·1269					
12. 19	21. 5	10. 46	·1406	20. 13	·02446				22. 8	37. 50	19. 24	·1291					
12. 54	18. 25	10. 49	·1402	20. 28	·02452				22. 12	36. 15	19. 26	·1283					
13. 9	19. 10	10. 55	·1415	20. 31	·02452				22. 20	43. 0	19. 30	·1288					
13. 23	16. 0	11. 3	·1410	20. 41	·02459				22. 25	38. 45	19. 38	·1259					
	***	11. 12	·1433	20. 47	·02496				22. 36	44. 5	19. 42	·1250					
13. 42	22. 10	11. 30	·1419	20. 53	·02476				22. 43	42. 10		(†)					
13. 57	12. 0	11. 44	·1445	20. 57	·02507				22. 54	40. 10	19. 54	·1250					
14. 11	11. 20	11. 56	·1425	20. 59	·02474				22. 57	42. 0	20. 10	·1276					
14. 36	32. 0	12. 12	·1365	23. 21	·02651				22. 59	41. 0	20. 13	·1270					
14. 44	41. 20	12. 20	·1376	23. 40	·02655				23. 9	40. 0	20. 18	·1279					
14. 56	33. 30	12. 40	·1355	23. 53	·02682				23. 17	53. 20	20. 19	·1274					
15. 9	28. 25	12. 47	·1358	23. 59	·02667				23. 23	44. 15	20. 26	·1310					
15. 13	32. 30	12. 54	·1366						23. 25	47. 0	20. 35	·1295					
15. 20	25. 30	12. 57	·1365						23. 37	44. 45	20. 39	·1303					
15. 28	24. 5	13. 10	·1377						23. 39	47. 10	20. 42	·1292					
15. 43	6. 45	13. 13	·1375						23. 44	43. 15	20. 49	·1276					
15. 54	5. 20	13. 19	·1379						23. 56	48. 0	20. 52	·1289					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 4		Aug. 4						
h m	° ′ ″	h m		h m		h m	°	°
23. 59	20. 45. 10	21. 3	·1261					
		21. 12	·1283					
		21. 31	·1284					
		21. 39	·1277					
		21. 42	·1287					
		21. 49	·1277					
		21. 54	·1292					
		22. 12	·1282					
		22. 25	·1292					
		22. 41	·1273					
		22. 56	·1269					
			(†)					
		23. 3	·1268					
		23. 5	·1275					
		23. 21	·1303					
		23. 25	·12[illegible]					
		23. 36	·1304					
		23. 41	·1266					
		23. 56	·1338					
		23. 59	·1326					
Aug. 5		Aug. 5		Aug. 5		Aug. 5		
0. 0	20. 45. 10	0. 0	·1326	0. 0	·02667	Min.	60·2	61·6
0. 12	44. 40	0. 14	·1339	0. 24	·02697	1. 0	60·9	62·2
0. 15	46. 55	0. 21:	·1328	0. 33	·02756	3. 0	60·7	62·9
0. 24	43. 10	0. 28	·1332	0. 40	·02751	9. 0	61·8	62·9
0. 31	46. 25	0. 40	·1381	0. 49	·02819	21. 0	62·6	63·9
0. 40	55. 50	0. 43	·1356	0. 57	·02780	Max.	63·4	64·9
0. 43	46. 30	0. 4[illegible]	·1385	2. 23	·02836			
0. 45	44. 30	0. 56	·1357	2. 44	·02744			
0. 47	47. 10	1. 5	·1388	3. 11	·02832			
0. 56	42. 0	1. 16	·1379	3. 23	·02814			
0. 58	40. 5	1. 22	·1385	3. 41	·02798			
1. 16	45. 0	1. 26	·1368	3. 53	·02767			
1. 25	48. 35	1. 42	·1396	4. 31	·02790			
1. 28	46. 35	1. 46	·1384	6. 9	·02776			
1. 38	50. 50	1. 56	·1402	9. 23	·02822			
1. 43	48. 45	2. 4	·1353	10. 1	·02797			
1. 44	50. 30	2. 16	·1414	10. 11	·02811			
1. 56	52. 50	2. 19	·1404	10. 42	·02795			
1. 58	50. 35	2. 23	·1412	10. 54	·02777			
2. 11	56. 55	2. 28	·1404	12. 9:	·027[illegible]6			
2. 14	59. 50	[illegible]	·1409	12. 34	·02704			
2. 23	50. 30	2. 36	·1398	12. 52	·02666			
2. 28	35. 5	2. 42	·1404	13. 8	·02670			
2. 36	34. 5	2. 46	·1366	13. 28	·02648			
2. 42	42. 5	[illegible]	·1370	13. 39	·02652			
2. 45	39. 0	[illegible]	·1355	13. 57	·02696			
2. 58	41. 5	[illegible]	·1350	14. 38	·02706			
3. 8	40. 50	3. 19	·1[illegible]	15. 1	·02683			
3. 12	36. 0	3. 24	·1382	15. 26	·02709			
3. 40	34. 55	3. 26	·1386	15. 48	·02752			
3. 46	37. 0	3. 35	·1[illegible]	16. 15	·02758			
3. 50	36. 10	3. 42	·1376	19. 18	·02809			
3. 57	38. 50	3. 48	·1372	20. 19	·02821			
4. 2	36. 5	3. 52	·1378	21. 39	·02820			
4. 23	34. 5	3. 56	·1354	23. 15	·02810			
4. 29	34. 50	4. 8	·135[illegible]	23. 59	·02829			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Aug. 5		Aug. 5	
h m	° ′ ″	h m	
4. 38	20. 33. 10	4. 12	·1366
4. 41	34. 5	4. 14	·1362
4. 44	33. 5	4. 23	·1368
4. 57	32. 30	4. 31	·1362
5. 8	33. 5	4. 39	·1368
5. 15	31. 55	4. 50	·1361
5. 26	32. 30	5. 2	·1369
5. 29	32. 25	5. 10	·1364
5. 57	33. 15	5. 22	·1368
6. 6	32. 35	5. 34	·1369
6. 38	33. 35	5. 46	·1363
6. 43	33. 15	6. 43	·1367
6. 54	34. 0	6. 52	·1364
7. 7	33. 50	7. 14	·1368
7. 35	35. 25	7. 20	·1366
7. 58	34. 30	7. 28	·1374
8. 16	35. 25	8. 4	·1371
8. 26	34. 55	8. 41	·1381
8. 31	34. 0	9. 3	·1376
8. 38	34. 0	9. 12	·1379
8. 58	32. 30	9. 39	·1376
9. 10	33. 10	9. 48	·1381
9. 23	32. 0	9. 53	·1373
9. 27	32. 0	9. 59	·1373
9. 38	30. 30	10. 8	·1363
9. 56	30. 15	10. 15	·1380
10. 8	26. 35	10. 24	·1377
10. 11	28. 0	10. 40	·1392
10. 23	25. 25	10. 56	·1372
10. 28	25. 5	11. 11	·1361
11. 7	26. 55	11. 20	·1364
11. 11	26. 30	11. 42	·1366
11. 16	26. 35	11. 46	·1372
11. 22	25. 10	12. 7	·1379
11. 29	25. 20	12. 42	·1345
11. 44	26. 50	12. 52	·1344
11. 58	29. 30	13. 11	·1362
12. 8	33. 35	13. 28	·1345
12. 12	35. 30	13. 39	·1344
12. 29	35. 55	13. 48	·1357
12. 43	32. 15	13. 57	·1368
12. 55	33. 25		***
13. 8	31. 55	14. 19	·1374
13. 17	36. 0	14. 42	·1366
13. 27	34. 0	15. 10	·1343
13. 42	25. 0	15. 15	·1348
13. 52	25. 0	15. 26	·1345
13. 56	24. 10	15. 36	·1350
14. 10	26. 5	15. 52	·1356
14. 19	26. 5	15. 56	·1353
14. 23	24. 30	16. 27	·1362
14. 30	24. 30	16. 41	·1358
14. 44	28. 35	16. 59	·1365
15. 0	24. 40	17. 8	·1360
15. 12	22. 5	17. 30	·1357
15. 28	25. 0	17. 39	·1360
15. 39	25. 0	17. 49	·1353
16. 0	28. 30	18. 14	·1344

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 5		Aug. 5						
h m	° ′ ″	h m		h m		h m	°	°
16. 6	20. 28. 5	18. 20	·1345					
16. 12	27. 55		***					
16. 35	29. 40	18. 41	·1341					
16. 38	28. 35	19. 34	·1347					
16. 42	29. 10	19. 42	·1343					
16. 50	28. 5	19. 55	·1346					
17. 8	28. 20	20. 19	·1343					
17. 13	27. 5		***					
17. 33	27. 15	20. 46	·1338					
17. 41	29. 0	21. 5	·1338					
17. 49	28. 15	21. 19	·1333					
18. 9	29. 15	21. 28	·1337					
18. 30	30. 55	21. 44	·1336					
18. 38	30. 0	21. 56	·1340					
18. 55	30. 0	22. 44	·1342					
19. 10	31. 15	22. 54	·1337					
19. 23	30. 5	23. 5	·1337					
19. 31	30. 0	23. 19	·1330					
19. 41	30. 55	23. 37	·1341					
19. 43	29. 40	23. 43	·1348					
19. 53	30. 45	23. 50	·1346					
20. 3	29. 30	23. 59	·1351					
20. 6	30. 20							
20. 24	30. 20							
20. 30	31. 50							
20. 40	30. 55							
20. 49	31. 50							
20. 56	31. 35							
21. 37	31. 50							
21. 45	32. 50							
22. 35	35. 20							
22. 46	35. 30							
22. 56	34. 55							
23. 11	36. 0							
23. 18	35. 25							
23. 42	37. 15							
23. 55	36. 50							
23. 59	37. 30							
Aug. 6		Aug. 6		Aug. 6		Aug. 6		
0. 0	20. 37. 30	0. 0	·1351	0. 0	·02829	0. 0	63·4	65·0
0. 28	37. 0	0. 15	·1356	3. 24	·02898	Max.	64·3	65·6
0. 33	36. 5	0. 33	·1353	6. 36	·02919	9. 0	62·5	64·8
0. 39	35. 20	0. 49	·1357	7. 9	·02935	Min.	61·9	63·2
1. 28	37. 0	1. 26	·1366	8. 8	·02932	21. 0	63·7	65·5
2. 36	36. 30	2. 29	·1373	9. 18	·02940			
2. 44	35. 55	2. 38	·1372	11. 15	·02902			
3. 9	35. 55	2. 50	·1376	11. 43	·02877			
3. 24	35. 0	2. 58	·1375	14. 9	·02891			
4. 56	32. 0	3. 8	·1380	14. 32	·02883			
5. 39	32. 0	3. 14	·1371	16. 31	·02903			
6. 13	30. 55	3. 20	·1375	23. 59	·02908			
6. 41	30. 25	3. 24	·1372					
7. 11	31. 45	3. 29	·1375					
7. 27	31. 20	3. 38	·1371					
7. 43	31. 45	3. 43	·1373					
7. 56	30. 30	4. 15	·1372					
8. 11	31. 0	4. 21	·1374					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 6		Aug. 6						
h m	° ′ ″	h m		h m		h m	°	°
8. 39	20. 31. 10	4. 41	·1373					
8. 54	30. 5	4. 51	·1368					
9. 26	31. 25	5. 45	·1369					
9. 41	29. 50	5. 52	·1364					
9. 56	30. 15	6. 20	·1362					
10. 6	29. 15	6. 34	·1369					
10. 51	34. 50	6. 41	·1367					
10. 56	34. 10	6. 55	·1370					
11. 10	34. 10	7. 15	·1368					
11. 31	32. 0	7. 39	·1370					
11. 41	31. 50	7. 51	·1367					
11. 52	30. 50	8. 3	·1372					
12. 9	30. 5	8. 10	·1370					
12. 15	30. 5	8. 28	·1369					
12. 40	29. 25	9. 3	·1373					
13. 11	28. 55	9. 33	·1370					
13. 22	30. 0	9. 39	·1372					
13. 38	30. 0	9. 44	·1370					
14. 7	31. 10	9. 54	·1373					
14. 40	29. 55	10. 10	·1368					
15. 23	29. 10	10. 19	·1371					
15. 42	29. 25	10. 39	·1361					
16. 10	28. 30	10. 49	·1364					
17. 58	27. 40	11. 10	·1378					
18. 26	27. 0	11. 36	·1370					
18. 36	27. 40	11. 43	·1371					
18. 42	26. 55	12. 11	·1366					
19. 25	27. 40	13. 14	·1367					
20. 14	26. 50	13. 32	·1364					
23. 53	38. 30	13. 43	·1368					
23. 56	38. 30	14. 4	·1365					
23. 59	39. 15	14. 24	·1367					
		16. 0	·1369					
		18. 55	·1356					
		21. 43	·1350					
		22. 6	·1351					
		22. 29	·1355					
		22. 38	·1354					
		23. 39	·1360					
		23. 52	·1364					
		23. 59	·1362					
Aug. 7		Aug. 7		Aug. 7		Aug. 7		
0. 0	20. 39. 15	0. 0	·1362	0. 0	·02908	1. 0	64·3	66·0
0. 24	38. 50	0. 8	·1364	4. 32	·02972	3. 0	64·8	66·7
0. 36	39. 40	0. 23	·1362	7. 27	·02993	Max.	65·4	68·0
1. 20	38. 0	0. 33	·1367	7. 54	·02989	9. 0	65·0	67·0
1. 26	38. 10	1. 8	·1363	10. 42	·02991	Min.	62·5	64·8
1. 34	37. 30	1. 48	·1367	13. 27	·02953	21. 0	63·6	66·8
1. 41	37. 30	2. 20	·1366	16. 59	·02936			
2. 7	36. 10	2. 40	·1372	19. 57	·02969			
2. 12	36. 30	2. 49	·1370	23. 59	·02938			
2. 23	36. 0	2. 54	·1373					
2. 38	36. 30	3. 8	·1367					
2. 58	34. 55	3. 40	·1367					
3. 23	34. 35	3. 46	·1370					
4. 12	33. 0	4. 6	·1367					
5. 9	32. 30	4. 39	·1371					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 7		Aug. 7						
h m	° ′ ″	h m		h m		h m	°	°
5. 36	20. 32. 40	5. 4	·1370					
5. 54	31. 45	5. 41	·1374					
6. 7	31. 30	5. 52	·1371					
6. 11	30. 5	6. 6	·1373					
6. 27	29. 10	6. 11	·1367					
6. 39	29. 10	6. 26	·1369					
7. 11	30. 50	6. 31	·1374					
8. 5	30. 10	6. 50	·1372					
8. 24	30. 30	7. 8	·1377					
9. 56	30. 30	7. 49	·1374					
10. 3	30. 50	9. 39	·1371					
10. 19	30. 10	9. 57	·1368					
10. 28	30. 0	10. 17	·1373					
10. 40	31. 0	10. 39	·1370					
10. 56	31. 15	10. 50	·1372					
11. 13	30. 30	10. 57	·1371					
11. 43	31. 5	11. 10	·1373					
11. 59	32. 50	11. 33	·1372					
12. 12	32. 50	11. 49	·1369					
13. 8	31. 30	12. 57	·1372					
14. 52	30. 35	13. 32	·1370					
15. 24	30. 20	16. 3	·1371					
15. 45	30. 35	16. 26	·1370					
16. 10	30. 20	17. 59	·1371					
18. 40	29. 15	20. 52	·1353					
19. 26	28. 0	21. 54	·1347					
20. 23	28. 15	23. 2	·1348					
20. 41	28. 25	23. 49	·1352					
20. 52	28. 55	23. 59	·1356					
21. 26	29. 40							
21. 53	30. 35							
23. 47	38. 20							
23. 59	39. 30							
Aug. 8		Aug. 8		Aug. 8		Aug. 8		
0. 0	20. 39. 30	0. 0	·1356	0. 0	·02938	1. 0	64·1	66·0
0. 36	40. 35	1. 26	·1370	1. 59	·02964	3. 0	64·3	66·4
1. 2	40. 35	2. 10	·1372	5. 18	·02982	Max.	65·5	67·2
1. 44	39. 35	2. 21	·1375	8. 57	·02982	9. 0	64·1	66·0
2. 12	38. 55	2. 39	·1375	11. 4	·02931	Min.	59·8	61·9
2. 22	39. 5	2. 52	·1377	11. 56	·02896	21. 0	62·4	64·2
3. 4	37. 30	3. 33	·1374	14. 46	·02863	22. 0	62·8	64·3
3. 28	35. 35	3. 40	·1376	16. 19	·02834	23. 0	63·3	65·0
3. 53	35. 10	3. 49	·1375	17. 35	·02836			
4. 41	33. 5	4. 0	·1377	19. 2	·02845			
4. 58	32. 45	4. 37	·1376	21. 5	·02841			
5. 11	32. 35	5. 12	·1380	23. 59	·02859			
5. 19	32. 10	5. 14	·1378					
5. 28	32. 10	5. 26	·1381					
6. 11	30. 40	6. 26	·1374					
7. 12	30. 0	6. 59	·1377					
7. 39	30. 35	7. 6	·1374					
8. 53	30. 0	7. 14	·1378					
9. 7	30. 25	8. 8	·1377					
9. 43	30. 5	8. 19	·1380					
9. 56	29. 30	9. 10	·1377					
10. 11	29. 30	9. 40	·1378					
10. 26	30. 35	10. 11	·1375					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 8		Aug. 8						
h m	° ′ ″	h m		h m		h m	°	°
10. 37	20. 29. 30	10. 34	·1379					
10. 59	30. 0	10. 49	·1376					
11. 56	28. 15	11. 10	·1385					
12. 11	28. 55	11. 26	·1386					
12. 23	28. 35	12. 12	·1372					
12. 44	29. 10	12. 48	·1376					
13. 25	28. 30	15. 19	·1379					
14. 7	27. 30	17. 48	·1373					
14. 39	28. 5	20. 34	·1357					
14. 52	27. 45	21. 25:	·1354					
15. 24	27. 55	22. 37	·1357					
17. 26	28. 10	22. 55	·1360					
17. 38	27. 30	23. 59	·1366					
18. 28	27. 30							
18. 54	27. 0							
19. 22	27. 35							
19. 28	27. 25							
20. 28	28. 30							
20. 40	28. 30							
21. 37	30. 30							
	(†)							
23. 27	36. 15							
23. 59	37. 25							
Aug. 9		Aug. 9		Aug. 9		Aug. 9		
0. 0	20. 37. 25	0. 0	·1366	0. 0	·02859	0. 0	63·6	65·3
2. 1	39. 5	1. 41	·1377	9. 23	·02820	1. 0	64·4	65·8
2. 25	38. 5	2. 57	·1382	11. 31	·02804	2. 0	63·9	66·0
	(†)	3. 18	·1372	11. 36	·02811	3. 0	64·8	66·3
3. 13	40. 0	4. 19	·1376	11. 45	·02799	Max.	65·3	67·2
5. 7	36. 35	4. 49	·1372	13. 8	·02791	9. 0	65·3	67·2
5. 36	36. 25	5. 55	·1377	15. 23	·02763	Min.	62·2	64·6
6. 12	36. 25	7. 19	·1378	16. 57	·02742	21. 0	64·4	66·0
6. 54	35. 35	7. 45	·1375	17. 16	·02733	22. 0	64·6	66·0
7. 28	36. 0	8. 46	·1374	18. 12	·02736	23. 0	64·6	66·0
7. 47	35. 30	9. 56	·1371	18. 33	·02745			
8. 9	35. 30	10. 13	·1374	19. 5	·02736			
8. 58	35. 50	10. 17	·1371	20. 7	·02751			
9. 11	35. 25	11. 16	·1371	21. 4	·02745			
11. 18	35. 0	11. 31	·1376	22. 9	·02769			
11. 30	35. 35	11. 39	·1389	22. 45	·02735			
11. 39	36. 55	11. 55	·1384	23. 59	·02763			
11. 56	33. 5	12. 23	·1378					
12. 33	31. 25	12. 52	·1376					
13. 0	32. 10	13. 4	·1377					
13. 20	31. 30	13. 14	·1376					
13. 30	31. 50	13. 42	·1378					
13. 41	31. 10	14. 6	·1375					
13. 54	31. 40	15. 18	·1376					
14. 20	30. 40	15. 50	·1369					
15. 24	31. 15	16. 50	·1378					
15. 30	32. 20	17. 0	·1382					
15. 42	32. 15	17. 12	·1378					
16. 3	34. 10	17. 46	·1375					
16. 11	34. 10	18. 13	·1361					
16. 23	33. 0	18. 28	·1362					
16. 32	31. 40	18. 51:	·1378					
16. 54	31. 20	19. 50	·1365					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

August 8^{d}. 21^{h}. 37^{m}. to 23^{h}. 26^{m}. Damper experiments with the Declination Magnet were in progress.

August 9. Damper experiments with the Declination Magnet were made between 2^{h}. 25^{m}. and 3^{h}. 13^{m}., and also between 21^{h}. 40^{m}. and 23^{h}. 59^{m}.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Aug. 9		Aug. 9							Aug.10		Aug.10		Aug.10				
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
17. 8	20. 31. 50	20. 0	·1365						5. 41	20. 45. 35	6. 45	·1368	13. 6	·02865			
17. 12	29. 50	20. 27	·1361						5. 44	42. 35	6. 52	·1364	13. 16	·02862			
17. 23	29. 35	20. 42	·1364						5. 57	45. 50	7. 2	·1368	13. 31	·02873			
17. 37	30. 10	21. 8	·1361						6. 11	38. 0	7. 8	·1355	13. 39	·02852			
17. 53	31. 40	21. 42	·1363						6. 14	42. 50	7. 10	·1368	13. 58	·02866			
17. 58	31. 25	21. 55	·1361						6. 26	37. 30	7. 16	·1372	14. 16	·02864			
18. 10	32. 45	22. 23	·1368						6. 42	35. 30	7. 18	·1368	14. 41	·02810			
18. 23	31. 50	22. 54	·1366						6. 56	29. 30	7. 29	·1399	14. 58	·02798			
18. 38	34. 5	23. 14	·1358						6. 59	29. 0	7. 35	·1365	15. 8	·02804			
19. 0	30. 30	23. 21	·1359						7. 11	11. 55	7. 49	·1409	15. 24	·02776			
19. 23	30. 30	23. 37	·1352						7. 17	9. 30	8. 2	·1387	15. 53	·02785			
19. 32	32. 0	23. 41	·1341						7. 23	4. 5	8. 9	·1397	16. 11	·02809			
19. 45	30. 55	23. 59	·1347						7. 32	16. 20	8. 21	·1350	16. 24	·02834			
20. 9	31. 35								7. 39	9. 0	8. 42	·1367	17. 1	·02861			
20. 23	31. 45								7. 56	30. 0	8. 54	·1363	17. 53	·02866			
20. 31	32. 5								7. 59	30. 0	9. 7	·1367	18. 18	·02866			
20. 44	34. 10								8. 12	42. 5	9. 14	·1365	18. 38	·02871			
21. 11	33. 25								8. 28	26. 0	9. 26	·1366	18. 49	·02855			
21. 40	32. 40								8. 59	32. 0	9. 30	·1364	20. 44	·02861			
	(†)								9. 12	31. 45	9. 40	·1366	22. 1	·02863			
23. 59	41. 40								9. 23	30. 55	9. 50	·1364	22. 10	·02878			
Aug.10		Aug.10		Aug.10		Aug.10			9. 26	31. 20	10. 4	·1370	22. 23	·02863			
0. 0	20. 41. 40	0. 0	·1347	0. 0	·02763	0. 0	64·8	66·4	9. 33	29. 30	10. 18	·1365	22. 34	·02876			
0. 12	42. 35	0. 3	·1339	1. 10	·02803	1. 0	64·7	66·1	9. 42	29. 40	10. 37	·1395	23. 59	·02865			
0. 25	42. 35	0. 14	·1345	1. 18	·02802	Min.	64·7	66·1	9. 56	28. 55	10. 43	·1387					
0. 32	40. 30	0. 24	·1325	2. 37	·02859	2. 0	64·7	66·1	10. 23	30. 10	10. 57	·1437					
0. 56	40. 0	0. 52	·1350	3. 23	·02919	3. 0	64·8	67·0	10. 33	23. 5	11. 22	·1342					
1. 4	41. 55	1. 5	·1340	3. 39	·02926	Max.	66·1	67·4	10. 43	27. 0	11. 38	·1363					
1. 24	42. 10	1. 38	·1378	3. 54	·02967	9. 0	65·7	67·4	10. 55	14. 50	11. 43	·1371					
1. 33	44. 40	1. 47	·1373	4. 39	·03011	Min.	65·2	66·5	11. 12	39. 50	11. 48	·1367					
1. 41	44. 5	1. 53	·1383	5. 3	·03049	21. 0	65·3	67·0	11. 26	24. 5	11. 54	·1376					
1. 54	45. 45	1. 58	·1381	5. 9	·03036				11. 41	27. 40	12. 7	·1380					
2. 13	45. 55	2. 6	·1383	5. 46	·03071				11. 50	27. 10	12. 12	·1371					
2. 25	49. 5	2. 21	·1375	5. 54	·03062				11. 58	31. 50	12. 30	·1361					
2. 33	49. 55	2. 35	·1393	6. 1	·03077				12. 26	25. 30	12. 39	·1368					
2. 42	48. 50	2. 49	·1406	6. 12	·03062				13. 11	28. 30	12. 49	·1372					
2. 56	52. 0	3. 5	·1380	6. 23	·03077				13. 23	30. 15	12. 59	·1369					
3. 2	50. 0	3. 10	·1346	6. 48	·03081				13. 27	28. 0	13. 4	·1371					
3. 14	48. 0	3. 15	·1351	6. 52	·03090				13. 41	29. 55	13. 9	·1368					
3. 26	47. 50	3. 19	·1349	6. 55	·03137				13. 56	26. 20	13. 13	·1374					
3. 43	43. 40	3. 48	·1374	7. 4	·03063				14. 7	29. 30	13. 33	·1360					
3. 53	44. 10	4. 5	·1365	7. 13	·03038				14. 23	35. 10	13. 42	·1367					
3. 56	42. 0	4. 20	·1408	7. 24	·02975				14. 33	41. 55	13. 54	·1361					
4. 11	47. 45	4. 24	·1412	7. 33	·02975				14. 39	42. 30	14. 6	·1360					
4. 15	46. 25	4. 34	·1390	7. 48	·02932				14. 51	36. 15	14. 14	·1363					
4. 26	49. 45	4. 43	·1399	7. 53	·02934				14. 58	36. 25	14. 25	·1356					
4. 28	48. 30	4. 49	·1398	8. 3	·02891				15. 7	35. 35	14. 39	·1359					
4. 31	46. 35	5. 3	·1409	9. 36	·02893				15. 25	38. 35	14. 51	·1355					
4. 41	49. 5	5. 12	·1378	10. 10	·02859					...	15. 4	·1357					
4. 47	44. 10	5. 26	·1408	10. 26	·02784				15. 51	35. 30	15. 10	·1355					
4. 57	51. 20	5. 36	·1387	10. 41	·02791				16. 11	26. 10	15. 23	·1362					
5. 9	45. 5	5. 44	·1393	10. 53	·02776				16. 22	27. 30	15. 30	·1361					
5. 11	46. 50	5. 53	·1380	11. 7	·02748				16. 24	26. 0	15. 41	·1363					
5. 13	45. 45	6. 0	·1376	11. 30	·02813				16. 41	27. 50	15. 46	·1367					
5. 23	49. 0	6. 10	·1362	11. 54	·02829				16. 56	26. 20	15. 55	·1372					
5. 26	46. 50	6. 19	·1375	12. 3	·02812				17. 8	28. 5		...					
5. 31	42. 55	6. 26	·1363	12. 23	·02829				17. 13	26. 10	16. 11	·1366					
									17. 38	28. 15	16. 19	·1374					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Aug.10		Aug.10						
h m	° ' "	h m		h m		h m		
17.39	20. 29. 25	16.27	·1364					
17.42	30. 5	16.35	·1369					
17.53	28. 50	16.58	·1363					
17.56	32. 30	17. 7	·1370					
18. 5	34. 55	17.10	·1366					
18.11	32. 30	17.27	·1377					
18.16	32. 30	17.38	·1376					
18.18	30. 20	17.56	·1365					
18.24	33. 5	18. 6	·1367					
18.28	28. 20	18.37	·1343					
18.31	26. 10	18.49	·1361					
18.43	33. 5	19. 3	·1343					
18.56	29. 20	19.39	·1342					
19.11	34. 50	19.52	·1334					
19.22	32. 40	20.18	·1343					
19.29	30. 10	20.43	·1340					
19.41	31. 50	20.56	·1341					
19.43	29. 0	21.27	·1322					
20. 3	33. 35	21.55	·1340					
20. 7	31. 20	22.10	·1330					
	***	22.14	·1336					
20.29	34. 0	22.37	·1325					
20.39	32. 30	22.45	·1334					
20.53	37. 0	22.59	·1325					
21. 2	36. 10	23.16	·1337					
21.11	40. 0	23.28	·1328					
21.27	39. 0	23.34	·1333					
21.49	33. 0	23.41	·1331					
21.57	34. 35	23.56	·1346					
22. 2	32. 0	23.59	·1346					
22.14	37. 50							
22.26	36. 25							
22.40	40. 0							
22.58	39. 40							
23.39	43. 0							
23.47	42. 30							
23.59	44. 0							
Aug.11		Aug.11		Aug.11		Aug.11		
0. 0	20. 44. 0	0. 0	·1346	0. 0	·02865	1. 0	65·8	66·7
0.11	45. 25	0. 7	·1339	3. 7	·03020	3. 0	66·0	68·5
0.37	45. 15	0.13	·1355	3.56	·03045	Max.	67·0	69·0
0.44	46. 15	0.34	·1327	4. 9	·03061	0. 0	64·6	67·4
0.53	45. 10	0.42	·1331	4.24	·03052	Min.	60·2	60·7
0.59	49. 10	1.11	·1340	4.33	·03038	21. 0	62·5	64·2
1. 9	44. 30	1.25	·1362	4.59	·03069			
1.16	42. 50	1.38	·1354	5.37	·03055			
1.25	43. 25	2. 2	·1374	5.42	·03044			
1.37	40. 55	2. 5	·1370	5.56	·03037			
1.48	43. 10	2.24	·1373	6.13	·03056			
1.54	41. 50	2.35	·1362	6.53	·03034			
2. 1	42. 55	2.49	·1371	7.23	·03051			
2.10	41. 30	2.51	·1369	7.41	·03032			
2.38	42. 30	2.56	·1392	7.54	·03029			
2.46	40. 30	3. 4	·1389	8. 9	·03007			
2.56	33. 0	3. 8	·1392	8.57	·03011			
3. 9	34. 50	3.21	·1359	10.48	{·02897 ·02949			
3.24	35. 5	3.42	·1386					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Aug.11		Aug.11		Aug.11				
h m	° ' "	h m		h m		h m	°	°
3.37	20. 36. 50	3.46	·1380	12.30	·02913			
3.41	36. 20	3.50	·1385	13.35	·02884			
3.59	39. 50	3.55	·1368	15. 9	·02842			
4.11	34. 45	4. 0	·1369	15.53	·02795			
4.25	35. 40	4.10	·1362	16.23	·02788			
4.33	37. 50	4.13	·1365	17.16	·02761			
4.39	35. 0	4.30	·1358	17.35	·02761			
4.49	31. 50	4.33	·1357	18.43	·02780			
4.57	31. 50	4.41	·1348	19.31	·02813			
5. 2	33. 0	5.10	·1376	20.18	·02817			
5.11	32. 50	5.20	·1383	20.53	·02818			
5.23	34. 0	5.25	·1380	21. 9	·02825			
5.32	34. 0	5.40	·1393	22.53	·02821			
5.41	34. 50	5.48	·1380	23.59	·02869			
5.47	33. 30	6. 0	·1374					
5.56	33. 30	6.18	·1403					
6. 3	30. 50	6.25	·1395					
6.19	33. 55	6.37	·1390					
6.26	33. 30	6.41	·1394					
6.30	34. 10	6.51	·1386					
6.41	32. 30	7. 3	·1373					
6.44	30. 5	7. 7	·1380					
6.54	30. 5	7. 9	·1378					
6.59	22. 10	7.24	·1408					
7. 7	21. 50	7.44	·1385					
7.11	18. 35	7.56	·1393					
7.26	25. 50	8.15	·1370					
7.38	29. 20	8.35	·1378					
7.47	28. 25	9.11	·1382					
8. 9	34. 0	9.19	·1380					
8.25	29. 30	9.27	·1386					
9.11	32. 30	9.42	·1387					
9.42	33. 30	9.54	·1382					
9.58	29. 5	10.10	·1395					
10. 7	29. 30	10.33	·1410					
10.16	22. 20	10.59	·1385					
10.38	27. 30	11.16	·1391					
10.56	31. 40	11.27	·1383					
11.11	29. 0	11.34	·1389					
11.23	29. 0	11.52	·1380					
11.30	27. 10	12. 3	·1382					
11.46	28. 55	12.18	·1373					
12. 2	26. 30	12.32	·1378					
12.13	28. 40	13.25	·1384					
12.26	28. 25	13.40	·1379					
12.33	29. 30	14.13	·1375					
12.58	29. 30	14.19	·1377					
13. 8	28. 40	14.42	·1377					
13.26	30. 5	14.56:	·1373					
13.39	29. 0	15.21	·1381					
13.48	29. 55	15.26	·1378					
14. 9	32. 5	15.34	·1382					
14.13	32. 5	15.49	·1377					
14.27	33. 45	16. 3	·1367					
14.38	33. 20	16.12	·1372					
14.52	34. 5	16.30	·1373					
15. 7	32. 40	16.56	·1387					
15.13	34. 30	17.16	·1385					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.11		Aug.11						
h m	° ′ ″	h m		h m		h m	°	°
15. 32	20. 32. 10	17. 41	·1378					
15. 43	35. 10	17. 48	·1367					
15. 53	35. 15	18. 35	·1358					
16. 11	35. 0	18. 53	·1362					
16. 23	33. 5	19. 3	·1357					
16. 42	32. 40	19. 8	·1363					
17. 11	35. 10	19. 16	·1354					
17. 23	36. 50	19. 32	·1368					
17. 32	35. 30	19. 51	·1354					
17. 42	36. 25	20. 12	·1353					
17. 56	37. 0	20. 20	·1358					
18. 8	35. 30	20. 33	·1346					
18. 24	37. 40	20. 41	·1347					
18. 38	37. 40	20. 50	·1343					
18. 53	34. 50	21. 11	·1362					
18. 57	35. 25	21. 20	·1360					
19. 6	31. 55	21. 52	·1366					
19. 13	32. 50	22. 18	·1365					
19. 23	30. 30	22. 44	·1358					
19. 26	29. 55	23. 1	·1338					
19. 39	31. 45	23. 11	·1329					
19. 47	31. 35	23. 26	·1328					
20. 4	35. 25	23. 41	·1342					
20. 18	35. 25	23. 59	·1360					
20. 28	38. 0							
20. 41	35. 30							
20. 44	35. 30							
20. 57	31. 45							
21. 3	30. 45							
21. 11	32. 0							
21. 26	32. 0							
21. 38	33. 30							
21. 54	32. 35							
22. 23	36. 10							
22. 46	35. 50							
23. 1	37. 5							
23. 26	35. 5							
23. 31	38. 0							
23. 42	37. 25							
23. 59	37. 50							
Aug.12		Aug.12		Aug.12		Aug.12		
0. 0	20. 37. 50	0. 0	·1360	0. 0	·02869	1. 0	64·4	66·2
0. 8	37. 50	0. 13	·1356	1. 33	·02872	3. 0	64·5	66·1
0. 22	36. 55	0. 33	·1365	2. 14	·02933	Max.	64·5	66·2
0. 40	36. 30	0. 39	·1363	4. 24	·02917	9. 0	63·7	65·0
0. 55	38. 40	0. 55	·1375	5. 5	·02944	Min.	60·7	61·5
0. 58	37. 55	1. 3	·1367	5. 29	·02933	22. 40	63·6	65·2
1. 28	40. 30	1. 32	·1382	6. 10	·02958			
1. 56	38. 30	2. 8	·1347	6. 28	·02935			
2. 6	38. 30	2. 18	·1360	6. 54	·02951			
2. 13	36. 0	2. 34	·1376	7. 11	·02934			
2. 32	33. 25	2. 48	·1384	7. 34	·02943			
2. 56	33. 25	2. 58	·1375	7. 48	·02935			
3. 13	34. 30	3. 8	·1380	9. 3	·02942			
3. 38	34. 10	3. 20	·1389	10. 49	·02886			
3. 54	35. 5	3. 39	·1372	11. 9	·02883			
4. 9	33. 0	3. 53	·1385	11. 52	·02841			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.12		Aug.12		Aug.12				
h m	° ′ ″	h m		h m		h m	°	°
4. 35	20. 32. 30	4. 12	·1366	12. 42	·02835			
5. 9	33. 10	4. 26	·1371	14. 49	·02827			
5. 16	32. 50	4. 42	·1382	15. 23:	·02812			
5. 24	32. 55	4. 48	·1382	16. 8	·02752			
5. 32	31. 0	5. 9	·1393	17. 24:	·02774			
5. 53	28. 50	5. 26	·1371	18. 9	·02753			
5. 57	28. 50	5. 48	·1388	19. 3	·02823			
6. 8	28. 0	6. 13	·1400	21. 6	·02835			
6. 23	29. 30	6. 29	·1385	21. 49	·02807			
6. 28	29. 30	6. 43	·1403	22. 47	·02831			
6. 38	26. 10	6. 48	·1403	23. 59	·02840			
6. 53	29. 0	6. 56	·1403					
7. 5	29. 5	7. 35	·1386					
7. 17	28. 20	7. 45	·1377					
7. 26	28. 30	7. 58	·1380					
7. 39	30. 0	8. 10	·1379					
7. 43	29. 0	8. 22	·1384					
7. 56	28. 0	8. 59	·1378					
8. 12	27. 25	9. 12	·1382					
8. 38	29. 30	9. 19	·1380					
8. 50	30. 0	9. 34	·1386					
8. 59	28. 50	9. 42	·1383					
9. 12	29. 35	10. 8	·1389					
9. 25	29. 35	10. 20	·1386					
9. 38	30. 30	10. 28	·1387					
10. 2	29. 50	10. 48	·1382					
10. 17	28. 50	11. 6	·1384					
10. 28	30. 20	11. 28:	·1399					
10. 53	30. 20	11. 45	·1385					
11. 2	29. 0	12. 39	·1380					
11. 11	29. 0	12. 52	·1385					
11. 30	33. 50	13. 24	·1387					
11. 42	32. 25		* * *					
11. 56	32. 15	14. 45	·1376					
12. 14	28. 50	14. 55	·1377					
12. 32	28. 50	15. 19	·1374					
12. 42	30. 20	15. 36	·1365					
12. 57	30. 50	16. 16	·1386					
13. 24	28. 5	16. 55	·1378					
13. 51	25. 40	17. 35	·1388					
14. 13	27. 0	17. 56	·1384					
14. 25	29. 5	18. 19:	·1374					
14. 43	29. 5	18. 37	·1372					
15. 6	32. 30	18. 49	·1371					
15. 11	32. 50	19. 1	·1377					
15. 24	36. 0	19. 12	·1375					
15. 35	36. 0	19. 19	·1378					
15. 53	36. 40	19. 39	·1379					
16. 30	27. 5	19. 42	·1375					
16. 56	26. 40	19. 49	·1378					
17. 9	28. 10	20. 11	·1372					
17. 16	28. 10	20. 18	·1375					
17. 43	33. 10	20. 40	·1372					
17. 59	32. 30	20. 50	·1375					
18. 8	30. 30	20. 57	·1382					
18. 26	29. 40	21. 1	·1374					
18. 29	28. 30	21. 20	·1376					
18. 39	28. 30	21. 39	[illegible]					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.12		Aug.12						
h m	° ′ ″	h m		h m		h m	°	°
18. 47	20. 27. 35	21. 42	·1368					
18. 56	29. 5	22. 0	·1351					
19. 9	27. 30	22. 11	·1355					
19. 13	28. 50	22. 22	·1351					
19. 26	28. 50	23. 18	·1372					
19. 31	30. 10	23. 59	·1379					
19. 40	28. 10							
19. 46	29. 20							
19. 56	29. 30							
20. 12	28. 10							
20. 26	30. 5							
20. 34	30. 20							
20. 40	29. 30							
20. 53	30. 0							
20. 57	32. 0							
21. 6	31. 0							
21. 20	32. 10							
21. 38	33. 5							
21. 56	33. 5							
22. 7	34. 30							
22. 22	35. 10							
22. 30	34. 5							
23. 24	36. 0							
23. 28	35. 35							
23. 59	36. 10							
Aug.13		Aug.13		Aug.13		Aug.13		
0. 0	20. 36. 10	0. 0	·1379	0. 0	·02840	1. 0	64 ·2	66 ·3
1. 42	37. 20	0. 27	·1382	2. 1	·02865	Max.	65 ·0	66 ·3
2. 6	36. 25	1. 41	·1388	3. 13	·02918	9. 0	62 ·6	65 ·0
2. 12	36. 25	2. 28	·1371	4. 26	·02936	Min.	60 ·7	63 ·4
3. 11	32. 30	2. 49	·1369	4. 45	·02936	21. 0	62 ·4	64 ·3
3. 27	31. 30	3. 12	·1377	5. 16	·02953			
3. 37	32. 15	3. 25	·1383	5. 33	·02935			
3. 58	32. 25	3. 34	·1378	5. 43	·02953			
4. 11	33. 35	3. 41	·1385	6. 53	·02929			
4. 50	31. 30	3. 43	·1381	8. 2	·02908			
5. 0	28. 55	3. 56	·1385	9. 6	·02908			
5. 13	30. 5	4. 6	·1384	11. 47	·02828			
5. 25	28. 10	4. 15	·1393	13. 23	·02828			
5. 34	24. 5	4. 29	·1392	13. 54	·02809			
5. 39	26. 25	4. 52	·1377	15. 36	·02809			
5. 43	26. 15	5. 21	·1394	16. 22	·02798			
6. 11	29. 30	5. 38	·1380	19. 47	·02825			
6. 33	29. 55	5. 49	·1398	20. 10	·02826			
6. 53	31. 20	6. 0	·1401	20. 39	·02817			
7. 37	31. 30	6. 25	·1399	23. 0	·02828			
7. 58	32. 5	6. 41	·1390	23. 59	·02831			
8. 27	31. 30	6. 52	·1386					
8. 46	32. 5	6. 58	·1383					
9. 32	30. 30	7. 19	·1387					
9. 42	30. 30	7. 28	·1385					
9. 58	24. 55	7. 35	·1389					
10. 9	29. 10	7. 43	·1386					
10. 17	28. 5	7. 51	·1387					
10. 43	30. 0	7. 57	·1385					
10. 56	30. 30	8. 4	·1387					
11. 9	28. 40	8. 15	·1384					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.13		Aug.13						
h m	° ′ ″	h m		h m		h m	°	°
11. 26	20. 28. 0	8. 31	·1386					
11. 39	26. 50	9. 34	·1386					
11. 46	26. 50	9. 46	·1393					
12. 26	28. 30	9. 59	·1388					
12. 54	32. 10	10. 15	·1414					
12. 58	32. 10	10. 41	·1388					
13. 9	34. 35	11. 22	·1393					
13. 18	34. 35	12. 21	·1372					
13. 40	32. 15	13. 7	·1374					
13. 53	32. 15	13. 34	·1382					
14. 8	30. 10	13. 57	·1377					
14. 56	30. 10	14. 12	·1379					
15. 11	29. 25	14. 25	·1377					
15. 24	29. 30	15. 51	·1389					
15. 34	29. 10	16. 31	·1378					
16. 11	29. 30	16. 55	·1381					
16. 27	28. 25	17. 11	·1379					
16. 55	28. 55	17. 27	·1383					
17. 17	28. 50	17. 43	·1380					
	***	17. 50	·1384					
18. 16	28. 0	17. 57	·1381					
18. 32	28. 20	20. 27	·1377					
18. 47	27. 35	21. 35	·1340					
19. 42	29. 10	22. 23	·1359					
20. 3	31. 5		***					
20. 23	30. 25	23. 59	·1376					
20. 53	30. 10							
21. 29	35. 30							
22. 6	37. 35							
22. 9	37. 25							
22. 13	38. 50							
22. 53	35. 5							
22. 57	35. 15							
23. 5	34. 55							
23. 12	36. 0							
23. 59	35. 50							
Aug.14		Aug.14		Aug.14		Aug.14		
0. 0	20. 35. 50	0. 0	·1376	0. 0	·02831	1. 0	64 ·9	65 ·8
0. 13	36. 55	0. 41	·1374	2. 37	·02866	3. 0	64 ·0	66 ·3
0. 50	37. 25	0. 53	·1378	2. 44	·02878	Max.	64 ·9	66 ·
0. 56	36. 55	1. 23	·1378	2. 58	·02875	9. 0	64 ·4	66 ·
0. 58	37. 10	1. 36	·1383	5. 53	·02893	Min.	62 ·4	63 ·8
1. 8	37. 0	1. 53	·1379	7. 14	·02923	21. 0	63 ·3	65 ·0
1. 11	38. 0	2. 22	·1387	7. 33	·02917			
1. 54	36. 30	2. 29	·1384	7. 40	·02898			
2. 24	35. 50	2. 47	·1398	7. 54	·02898			
2. 27	34. 55	3. 0	·1384	8. 11	·02856			
2. 46	36. 5	3. 22	·1385	8. 43	·02862			
2. 55	35. 10	3. 26	·1380	9. 17	·02828			
3. 23	34. 50	3. 52	·1386	9. 56	·02856			
3. 27	34. 30	4. 13	·1400	10. 33	·02837			
3. 38	34. 50	4. 29	·1384	11. 9	·02809			
4. 12	34. 35	4. 43	·1379	11. 32	·02751			
4. 26	33. 20	4. 53	·1379	11. 47	·02765			
4. 42	33. 40	4. 56	·1387	11. 58	·02762			
4. 57	33. 30	5. 19	·1384	12. 9	·02705			
5. 15	32. 0	5. 35	·1388	12. 34	·02691			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 14		Aug. 14		Aug. 14				
h m	° ′ ″	h m		h m		h m	°	°
5. 41	20. 33. 50	5. 42	·1397	12. 57	·02752			
5. 43	32. 45	5. 50	·1390	13. 11	·02736			
5. 53	32. 35	6. 0	·1389	13. 46	·02751			
5. 56	32. 5	6. 4	·1400	14. 38	·02709			
6. 0	32. 50	6. 12	·1393	14. 53	·02709			
6. 11	31. 35	6. 16	·1400	16. 1	·02673			
6. 13	32. 5	6. 28	·1391	16. 23	·02681			
6. 26	31. 30	6. 36	·1393	16. 38	·02663			
6. 38	31. 40	6. 45	·1385	17. 35	·02672			
6. 54	30. 20	6. 56	·1386	18. 57	·02760			
7. 8	26. 35	7. 18	·1407	19. 23	·02781			
7. 14	27. 50	7. 24	·1399	22. 12	·02829			
7. 26	30. 10	7. 39	·1413	23. 59	·02834			
7. 29	27. 5	7. 43	·1400					
7. 39	30. 50	7. 57	·1411					
7. 41	29. 45	8. 5	·1398					
8. 2	35. 0	8. 12	·1398					
8. 11	27. 0	8. 20	·1388					
8. 15	24. 0	8. 47	·1421					
8. 27	19. 20	8. 58	·1397					
8. 57	36. 50	9. 7	·1390					
9. 3	36. 5	9. 25	·1357					
9. 12	37. 50	9. 39	·1370					
9. 30	24. 15	9. 45	·1368					
9. 39	24. 5	9. 57	·1377					
9. 53	19. 0	10. 3	·1375					
10. 8	14. 15	10. 13	·1382					
10. 23	20. 0	10. 37	·1363					
10. 30	22. 15	11. 11	·1373					
10. 41	24. 30	11. 19	·1366					
11. 12	29. 50	11. 42	·1362					
11. 16	25. 30	11. 55	·1383					
11. 27	22. 35	12. 6	·1388					
11. 57	34. 45	12. 13	·1378					
12. 8	24. 10	12. 42	·1352					
12. 13	25. 10	12. 58	·1403					
12. 24	22. 50	13. 19	·1379					
12. 35	13. 20	13. 42	·1385					
12. 58	25. 40	14. 10	·1384					
13. 9	23. 0	14. 26	·1377					
13. 17	23. 0	14. 48	·1380					
13. 26	21. 50	15. 10	·1392					
13. 43	25. 30	15. 25	·1392					
13. 59	25. 30	15. 51	·1379					
14. 11	23. 50	16. 19	·1363					
14. 26	23. 50	16. 40	·1375					
14. 38	24. 5	16. 46	·1375					
14. 42	23. 10	17. 13	·1394					
14. 58	28. 30	17. 28	·1395					
15. 41	23. 30	18. 2	·1349					
16. 29	40. 10	18. 8	·1355					
16. 41	40. 10	18. 26	·1352					
16. 57	44. 5	18. 38	·1353					
17. 26	40. 10	19. 13	·1377					
17. 30	40. 25	20. 27	·1369					
17. 35	38. 0	20. 44	·1364					
17. 41	38. 45	21. 20	·1354					
17. 46	37. 0	21. 26	·1358					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 14		Aug. 14						
h m	° ′ ″	h m		h m		h m	°	°
17. 56	20. 37. 10	21. 42	·1349					
18. 0	34. 30	21. 49	·1352					
18. 8	35. 50	21. 57	·1343					
18. 11	35. 10	22. 15	·1351					
18. 14	36. 25	22. 26	·1340					
18. 23	35. 30	22. 42	·1342					
18. 27	34. 30	22. 49	·1339					
18. 42	31. 0	23. 12	·1342					
19. 9	31. 5		***					
	***	23. 48	·1356					
19. 43	28. 10	23. 59	·1357					
19. 52	29. 0							
19. 54	27. 30							
20. 37	29. 0							
20. 55	28. 40							
21. 9	29. 5							
21. 17	28. 0							
21. 56	31. 40							
21. 58	30. 35							
22. 23	32. 30							
22. 26	32. 0							
23. 9	34. 25							
23. 17	34. 25							
23. 28	35. 40							
23. 33	35. 5							
23. 46	37. 30							
23. 59	38. 10							
Aug. 15		Aug. 15		Aug. 15		Aug. 15		
0. 0	20. 38. 10	0. 0	·1357	0. 0	·02834	1. 0	64·8	66·4
0. 23	40. 20	0. 17	·1363	0. 42	·02856	3. 10	64·7	66·8
0. 56	42. 30	0. 22	·1361	2. 34	·02946	Max.	64·9	67·1
1. 8	39. 0	0. 32	·1359	3. 1	·03061	9. 0	63·6	66·2
1. 10	34. 25	0. 41	·1365		·02968	Min.	63·4	65·4
1. 24	37. 30	0. 56	·1362	4. 34	·03012	21. 0	63·7	66·0
1. 30	37. 20	1. 4	·1349		- - -	22. 0	63·9	66·0
1. 42	40. 0	1. 20	·1369	5. 30	·03021	23. 20	64·2	66·5
1. 49	41. 50	1. 32	·1356	5. 44	·03007			
1. 55	39. 45	1. 38	·1361	6. 1	·03031			
2. 3	39. 25	1. 41	·1360	6. 16	·02993			
2. 8	40. 25	1. 44	·1376	6. 23	·02996			
2. 30	43. 0	1. 52	·1367	7. 1	·02948			
2. 37	44. 5	2. 6	·1374	7. 59	·02935			
2. 41	41. 5	2. 11	·1374		·02899			
2. 43	35. 30	2. 20	·1360	9. 2	·02891			
2. 45	38. 0	2. 41	·1351	10. 31	·02743			
2. 56	39. 55	2. 49	·1373	10. 53	·02768			
2. 59	25. 0	2. 57	·1355	11. 16	·02758			
3. 8	22. 10	3. 18	·1399	13. 38	·02821			
3. 23	29. 55	3. 22	·1396	15. 16	·02832			
3. 33	34. 30	3. 40	·1374	19. 0	·02819			
3. 41	36. 5	3. 43	·1373	21. 7	·02792			
3. 52	37. 50	3. 51	·1366	23. 59	·02780			
3. 56	35. 55	4. 5	·1389					
4. 3	36. 0	4. 12	·1379					
4. 9	33. 10	4. 22	·1390					
4. 24	33. 55	4. 32	·1392					
4. 28	35. 50	4. 41	·1406					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Aug. 15		Aug. 15							Aug. 15								
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
4. 36	20. 35. 0	4. 46	·1400						16. 39	20. 29. 40							
4. 43	35. 0	4. 52	·1408						16. 42	31. 10							
4. 47	32. 30	5. 0	·1400						16. 52	30. 0							
4. 54	33. 50	5. 16	·1407						16. 58	30. 35							
4. 58	36. 10	5. 35	·1407						17. 15	31. 0							
5. 13	34. 25	5. 52	·1385						17. 27	30. 10							
5. 22	35. 15	6. 6	·1391						17. 37	30. 55							
5. 35	34. 5	6. 12	·1403						17. 41	29. 50							
5. 43	36. 5	6. 20	·1397						17. 45	30. 50							
5. 53	32. 5	6. 39	·1405						17. 56	30. 20							
5. 59	28. 30	6. 50	·1381						18. 2	31. 15							
6. 9	29. 0	7. 4	·1361						18. 13	30. 20							
6. 12	26. 50	7. 25	·1374						18. 21	31. 50							
6. 25	32. 0	7. 30	·1365						18. 27	30. 45							
6. 29	29. 0	7. 45	·1356						18. 40	32. 0							
6. 54	33. 30	7. 56	·1356						18. 43	33. 10							
7. 8	31. 40	7. 58	·1365						18. 56	33. 10							
7. 23	24. 40	8. 14	·1364						19. 13	34. 5							
7. 37	28. 35	8. 34	·1360						19. 27	33. 30							
7. 43	29. 50	8. 54	·1366						19. 41	34. 5							
7. 54	27. 0	9. 19	·1359						20. 12	32. 45							
7. 58	26. 35	9. 37	·1375						20. 38	33. 0							
8. 12	29. 25	9. 53	·1418						21. 0	31. 35							
8. 23	28. 10	9. 59	·1406						21. 12	32. 50							
8. 38	30. 0	10. 4	·1413						22. 22	34. 50							
8. 43	30. 0	10. 15	·1408						22. 37	34. 50							
9. 11	34. 0	10. 33	·1373						22. 56	36. 0							
9. 30	33. 15	10. 40	·1372						23. 24	36. 50							
9. 41	25. 40	10. 53	·1393						23. 38	36. 50							
9. 44	17. 55	11. 9	·1386						23. 52	38. 0							
9. 56	22. 50	11. 21	·1370						23. 59	38. 0							
9. 58	21. 40	12. 37	·1365														
10. 9	29. 0	12. 43	·1360														
10. 11	29. 20	12. 49	·1365						Aug. 16		Aug. 16		Aug. 16		Aug. 16		
10. 23	37. 0	13. 11	·1363						0. 0	20. 38. 0	0. 0	·1364	0. 0	·02780	0. 0	64·8	66·4
10. 25	37. 30	13. 20	·1354						0. 26	38. 15	0. 20	·1370	3. 14	{ ·02836 ·02918	1. 0	64·6	67·0
10. 38	40. 30	13. 39	·1365						0. 59	42. 0	0. 28	·1367			2. 0	64·8	67·0
10. 42	39. 50	14. 28	·1363						1. 8	41. 50	0. 34	·1371	4. 28	·02931	3. 0	64·6	67·0
10. 46	36. 0	14. 56	·1366						1. 13	42. 25	0. 41	·1370	4. 35	·02942	Max.	65·0	68·1
10. 56	29. 0	15. 10	·1361						1. 38	40. 50	0. 48	·1374	5. 9	·02957	9. 0	64·6	67·0
11. 38	34. 30	15. 21	·1365						1. 43	42. 30	1. 0	·1374	5. 16	·02945	Min.	61·4	63·8
11. 53	29. 0	15. 39	·1363						1. 53	42. 30	1. 4	·1368	5. 24	·02971	21. 0	62·8	64·7
12. 13	29. 0	16. 8	·1365						1. 58	43. 0	1. 12	·1372	5. 35	·02965	22. 0	63·3	65·0
12. 40	30. 5	17. 15	·1360						2. 23	41. 20	1. 34	·1354	5. 44	·02982	23. 0	63·6	65·3
12. 46	29. 30	17. 50	·1362						2. 26	41. 20	1. 44	·1365	6. 13	·02978			
13. 9	31. 0	18. 36	·1350						2. 39	40. 5	1. 48	·1363	7. 24	·02949			
13. 14	30. 45	19. 6	·1349						2. 56	38. 50	1. 56	·1369	8. 47	·02937			
13. 26	29. 40	19. 39	·1344						3. 0	38. 55	2. 1	·1365	11. 31	·02902			
13. 40	32. 0	20. 18	·1349						3. 10	37. 35	2. 11	·1363	12. 0	·02836			
14. 1	30. 35	20. 48	·1342						3. 22	37. 35	2. 20	·1351	13. 3	·02855			
14. 17	30. 20	21. 29	·1346						3. 26	36. 45	2. 32	·1344	13. 39	·02844			
14. 29	30. 20	22. 18	·1348						4. 30	36. 10	3. 0	·1365	14. 33	·02849			
14. 44	30. 35	22. 43	·1354						4. 40	37. 5	3. 11	·1363	17. 26	·02835			
14. 54	30. 0	23. 19	·1356						4. 56	36. 20	3. 19	·1367	18. 53	·02842			
14. 59	30. 30	23. 37	·1363						5. 9	36. 30	3. 21	·1374	20. 6	·02831			
15. 12	29. 50	23. 48	·1361						5. 19	33. 0	3. 49	·1379	23. 59	·02829			
15. 23	30. 30	23. 59	·1364						5. 24	33. 0	3. 58	·1378					
16. 13	30. 30								5. 35	26. 35	4. 28	·1374					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.16		Aug. 16						
h m	° ′ ″	h m		h m		h m	°	°
5. 52	20. 27. 45	4. 40	·1389					
5. 56	28. 0	4. 48	·1387					
6. 24	31. 0	4. 50	·1383					
6. 52	32. 30	4. 55	·1385					
6. 58	32. 0	5. 5	·1382					
7. 46	31. 35	5. 10	·1383					
8. 14	32. 10	5. 15	·1363					
8. 33	32. 0	5. 22	·1377					
8. 53	31. 15	5. 34	·1362					
9. 8	31. 20	5. 47	·1379					
9. 21	31. 40	6. 1	·1385					
9. 37	31. 0	6. 22	·1376					
9. 56	31. 30	6. 43	·1375					
10. 24	31. 0	7. 44	·1383					
10. 54	31. 10	7. 59	·1377					
11. 11	30. 35	8. 7	·1378					
11. 29	36. 10	8. 13	·1376					
12. 8	32. 10	8. 25	·1379					
12. 15	31. 5	9. 4	·1377					
12. 37	30. 0	11. 21	·1378					
13. 9	32. 35	11. 40	·1399					
13. 44	29. 10	12. 19	·1383					
14. 13	28. 40	12. 20	·1386					
14. 28	29. 30	12. 32	·1379					
14. 49	28. 0	12. 52	·1374					
15. 7	27. 45	13. 13	·1382					
15. 23	28. 15	14. 11	·1377					
15. 39	28. 30	14. 33	·1379					
15. 48	28. 5	14. 54	·1376					
16. 3	28. 45	15. 49	·1379					
16. 24	27. 30	16. 1	·1376					
16. 55	29. 30	16. 12	·1382					
17. 8	29. 30	16. 21	·1376					
17. 15	30. 10	16. 42	·1373					
17. 26	29. 20	17. 13	·1378					
17. 38	30. 5	17. 36	·1376					
17. 41	29. 5	18. 10	·1380					
18. 6	29. 30	18. 29	·1378					
18. 11	28. 5	18. 41	·1379					
18. 22	28. 45	19. 41	·1371					
18. 29	28. 10	19. 52	·1372					
18. 39	27. 0	20. 7	·1363					
18. 53	28. 30	20. 14	·1364					
19. 0	27. 50	20. 20	·1359					
19. 10	28. 20	20. 41	·1358					
19. 19	27. 50	21. 27	·1366					
19. 25	28. 30	21. 54	·1362					
19. 38	27. 30	22. 39	·1361					
19. 58	29. 20	23. 18	·1368					
20. 9	28. 40	23. 59	·1374					
20. 28	29. 55							
20. 39	31. 5							
20. 45	30. 10							
21. 34	32. 25							
21. 57	32. 15							
22. 38	32. 40							
23. 2	33. 40							
23. 24	35. 45							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.16								
h m	° ′ ″	h m		h m		h m		°
23. 29	20. 35. 30							
23. 59	37. 0							
Aug.17		Aug.17		Aug. 17		Aug.17		
0. 0	20. 37. 0	0. 0	·1374	0. 0	·02829	0. 0	63 ·9	65 ·7
1. 13	38. 10	0. 11	·1373	2. 44	·02875	1. 0	64 ·8	66 ·2
2. 12	36. 30	0. 22	·1376	4. 24	·02889	2. 0	64 ·9	66 ·4
3. 22	34. 30	0. 35	·1374	7. 3	·02884	3. 0	64 ·6	66 ·5
4. 26	32. 50	0. 46	·1376	8. 53	·02890	Max.	64 ·9	66 ·5
5. 28	32. 0	3. 30	·1379	12. 2	·02861	9. 0	63 ·7	66 ·0
5. 42	32. 0	4. 26	·1376	16. 12	·02872	Min.	62 ·9	65 ·0
5. 56	31. 30	5. 45	·1382	20. 34	·02865	21. 0	63 ·7	65 ·2
6. 53	32. 0	6. 51	·1379	22. 16	·02782			
7. 19	32. 15	7. 22	·1383	23. 59	·02782			
7. 29	32. 0	7. 44	·1382					
8. 24	32. 10	8. 39	·1384					
9. 23	32. 10	9. 52	·1383					
9. 31	31. 45	10. 6	·1388					
10. 9	30. 50	10. 42	·1383					
10. 50	31. 40	11. 39	·1385					
11. 0	32. 0	11. 56	·1381					
11. 11	31. 30	15. 55	·1382					
11. 29	31. 30	18. 39	·1376					
11. 56	32. 35	18. 57	·1377					
12. 8	32. 0	20. 30	·1372					
12. 27	32. 0	20. 51	·1373					
12. 42	31. 30	21. 29	·1352					
13. 56	31. 45	21. 43	·1354					
14. 12	31. 20	21. 56	·1353					
15. 31	31. 0	22. 18	·1356					
18. 41	29. 10	22. 39	·1352					
18. 56	28. 35	22. 42	·1354					
19. 18	29. 0	22. 54	·1350					
19. 28	28. 30	23. 0	·1356					
19. 30	28. 30	23. 14	·1347					
19. 40	28. 20	23. 21	·1349					
20. 26	29. 55	23. 34	·1346					
20. 54	28. 50	23. 41	·1354					
21. 20	31. 0	23. 59	·1355					
21. 36	31. 55							
22. 6	36. 30							
22. 25	36. 30							
22. 56	35. 30							
23. 22	38. 50							
23. 35	38. 20							
23. 59	38. 50							
Aug.18		Aug.18		Aug.18		Aug.18		
0. 0	20. 38. 50	0. 0	·1355	0. 0	·02782	1. 0	64 ·4	66 ·0
0. 26	41. 50	0. 40	·1365	0. 48	·02784	3. 0	64 ·4	66 ·0
0. 28	41. 35	0. 43	·1364	2. 4	·02834	Max.	64 ·7	66 ·5
0. 38	42. 10	0. 52	·1370	5. 13	·02807	9. 0	63 ·8	66 ·0
0. 43	41. 30	1. 12	·1367	6. 23	·02811	Min.	61 ·8	65 ·2
0. 56	42. 25	1. 49	·1381	6. 52	·02793	21. 0	63 ·1	65 ·0
1. 35	39. 40	1. 51	·1378	7. 18	·02810			
1. 46	40. 0	2. 13	·1382	8. 13	·02792			
2. 5	40. 0		***	10. 26	·02771			
2. 41	42. 10	2. 43	·1395	11. 27	·02711			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 18		Aug. 18		Aug. 18				
h m	° ′ ″	h m		h m		h m	°	
2. 54	20. 39. 55	2. 54	·1385	11. 53	·02667			
3. 0	41. 30	3. 0	·1390	12. 36	·02693			
3. 6	41. 5	3. 7	·1386	13. 54	·02711			
3. 9	42. 10	3. 12	·1390	14. 38	·02711			
3. 19	36. 45	3. 18	·1374	15. 46	·02649			
3. 29	38. 10	3. 28	·1379	16. 33	·02653			
3. 56	30. 30	3. 35	·1366	16. 55	·02642			
4. 2	30. 50	3. 51	·1397		***			
4. 26	34. 30	4. 4	·1412	19. 26	·02680			
4. 42	35. 20	4. 11	·1414	19. 45	·02675			
4. 52	35. 10	4. 30	·1383	21. 30	·02709			
5. 4	35. 10	4. 59	·1371	22. 36	·02703			
5. 23	35. 0	5. 15	·1374	23. 59	·02718			
5. 44	31. 30	5. 30	·1367					
6. 2	32. 35	5. 45	·1374					
6. 17	32. 35	6. 11	·1383					
6. 26	33. 30	6. 16	·1379					
6. 32	33. 15	6. 23	·1391					
6. 42	33. 5	6. 54	·1372					
6. 54	32. 0	7. 2	·1373					
7. 11	26. 10	7. 21	·1388					
7. 34	31. 5	7. 41	·1384					
7. 58	33. 0	7. 51	·1387					
8. 13	33. 0	8. 14	·1384					
8. 41	33. 50	8. 27	·1385					
8. 49	33. 35	8. 41	·1384					
9. 8	33. 45	9. 7	·1388					
9. 32	33. 0	9. 27	·1384					
9. 53	32. 15	10. 20	·1385					
10. 16	32. 30	10. 34	·1400					
10. 34	34. 30	10. 41	·1396					
10. 43	30. 0	10. 52	·1405					
10. 55	29. 0	10. 56	·1406					
11. 4	28. 45	11. 9	·1419					
11. 11	27. 35	11. 21	·1428					
11. 17	29. 30	11. 40	·1420					
11. 32	31. 0	12. 4	·1373					
11. 39	33. 5	12. 24	·1363					
11. 59	25. 55	12. 35	·1366					
12. 9	28. 10	12. 43	·1364					
12. 52	28. 5	12. 50	·1365					
13. 14	32. 10	13. 7	·1362					
13. 26	30. 20	13. 15	·1362					
13. 38	31. 50	13. 27	·1368					
13. 52	31. 0	13. 51	·1374					
14. 16	33. 45	14. 3	·1372					
14. 40	31. 30	14. 31	·1375					
14. 56	33. 10	14. 37	·1373					
15. 2	31. 45	14. 46	·1378					
15. 12	31. 35	15. 0	·1377					
15. 23	31. 50	15. 22	·1391					
15. 27	30. 0	15. 27	·1389					
15. 37	31. 5	15. 55	·1335					
15. 54	36. 30	16. 26	·1370					
16. 9	38. 55	16. 42	·1386					
16. 22	38. 55	17. 0	·1392					
16. 30	37. 35	17. 19	·1388					
16. 53	39. 50	17. 28	·1382					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 18		Aug. 18						
h m	° ′ ″	h m		h m		h m	°	°
17. 9	20. 37. 50	17. 41	·1384					
17. 26	38. 0	17. 43	·1377					
17. 32	37. 0	17. 50	·1376					
17. 40	37. 0	18. 4	·1374					
17. 47	35. 0	18. 25	·1367					
18. 2	34. 35	18. 26	·1370					
18. 11	32. 40	18. 34	·1360					
18. 21	33. 30	18. 40	·1365					
18. 26	35. 50	18. 42	·1362					
18. 30	33. 0	19. 0	·1366					
18. 41	32. 10	19. 12	·1360					
18. 44	34. 25	19. 27	·1366					
18. 53	34. 50	19. 50	·1359					
18. 56	36. 20	20. 4	·1358					
19. 8	31. 15	20. 13	·1362					
19. 12	33. 50	20. 35	·1356					
19. 21	33. 30	21. 6	·1362					
19. 27	34. 55	21. 20	·1360					
19. 40	33. 30	21. 39	·1363					
20. 9	30. 5	21. 46	·1358					
20. 28	32. 0	21. 59	·1362					
20. 52	31. 5	23. 9	·1349					
21. 9	32. 25	23. 40	·1356					
21. 15	32. 0	23. 59	·1365					
21. 29	33. 0							
21. 39	33. 50							
21. 43	32. 50							
21. 54	34. 30							
21. 57	33. 55							
22. 12	36. 15							
22. 23	36. 15							
22. 31	37. 30							
22. 53	37. 40							
23. 59	40. 5							
Aug. 19		Aug. 19		Aug. 19		Aug. 19		
0. 0	20. 40. 5	0. 0	·1365	0. 0	·02718	1. 0	64·1	66·0
0. 42	42. 10	0. 19	·1374	1. 32	·02764	3. 0	63·8	66·0
0. 58	42. 0	0. 26	·1371	1. 45	·02772	Max.	65·0	67·0
1. 23	42. 50	0. 39	·1377	2. 15	·02798	9. 0	63·6	66·0
1. 38	41. 10	0. 50	·1370	5. 19	·02775	Min.	59·5	61·9
1. 44	35. 15		***	7. 27	·02787	22. 0	63·2	65·0
1. 57	37. 5	1. 16	·1380	8. 30	·02776			
2. 9	35. 0	1. 37	·1355	8. 49	·02791			
2. 13	35. 0	1. 52	·1396	9. 10	·02763			
2. 23	36. 5	2. 0	·1398	11. 1	·02710			
2. 28	34. 40	2. 9	·1394	11. 33:	·02644			
2. 33	35. 20	2. 20	·1398	11. 59	·02654			
2. 40	34. 30	2. 27	·1397	14. 21	·02628			
3. 1	36. 50	2. 37	·1403	15. 53	·02630			
3. 32	35. 10	2. 48	·1385	17. 18	·02616			
3. 41	35. 25	3. 29	·1384	19. 1	·02641			
4. 2	34. 55	3. 41	·1390	20. 9	·02637			
4. 11	34. 55	4. 4	·1386	20. 33	·02649			
4. 14	34. 15	4. 10	·1388	20. 52	·02638			
4. 28	34. 15	4. 18	·1386	21. 6	·02651			
4. 39	34. 35	4. 41	·1389	21. 33	·02638			
5. 8	33. 0	5. 3	·1385	23. 59	·02669			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.19		Aug.19						
h m	° ′ ″	h m		h m		h m	°	°
5. 23	20. 32. 5	5. 11	·1387					
5. 29	32. 30	5. 25	·1383					
5. 56	32. 45	5. 36	·1387					
6. 7	32. 0	5. 47	·1383					
6. 26	31. 0	5. 53	·1385					
6. 33	29. 25	6. 21	·1376					
6. 53	30. 15	6. 41	·1379					
6. 58	29. 30	7. 1	·1373					
7. 23	31. 10	7. 34	·1377					
7. 38	33. 0	7. 41	·1375					
7. 58	31. 0	8. 0	·1378					
8. 8	31. 0	8. 33	·1368					
8. 14	31. 10	8. 44	·1401					
8. 33	21. 55	8. 52	·1412					
8. 58	32. 50	9. 20	·1392					
9. 8	33. 0	9. 32	·1394					
9. 24	30. 0	9. 59	·1370					
9. 50	33. 50	10. 13	·1379					
10. 9	27. 0	10. 37	·1372					
10. 24	28. 5	10. 58	·1387					
10. 38	26. 40	11. 13	·1381					
11. 4	41. 20	11. 34	·1377					
11. 44	30. 25	12. 10	·1396					
12. 13	31. 40	13 4	·1379					
12. 23	32. 45	13. 30	·1383					
12. 38	32. 30	13. 55	·1376					
12. 54	31. 50	14. 5	·1377					
13. 0	30. 45	14. 43	·1371					
13. 8	31. 10	15. 9	·1376					
13. 23	30. 20	15. 32	·1377					
13. 31	30. 20	15. 46	·1375					
13. 42	29. 15	16. 45	·1381					
14. 7	29. 15	17. 19	·1375					
14. 12	28. 20	17. 34	·1377					
14. 52	30. 10	17. 52	·1370					
15. 7	29. 20	18. 0	·1372					
15. 43	29. 20	18. 27	·1363					
15. 58	31. 45	19. 37	·1366					
16. 28	28. 5	19. 54	·1362					
16. 58	34. 10	20. 9	·1354					
17. 21	28. 30	20. 26	·1355					
17. 37	29. 0	20. 50	·1344					
17. 44	27. 55	21. 4	·1350					
18. 10	27. 10	21 39	·1348					
18. 21	28. 10	21. 57	·1355					
18. 30	27. 30	22. 6	·1351					
18. 39	28. 20	22. 43	·1358					
18. 44	27. 10	22. 55	·1364					
18. 53	28. 40	23. 10	·1358					
19. 9	28. 40	23. 21	·1367					
19. 16	28. 0	23. 59	·1376					
19. 42	28. 15							
19. 54	27. 35							
20. 7	28. 10							
20. 14	30. 50							
20. 38	31. 35							
20. 43	30. 0							
20. 47	30. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.19								
h m	° ′ ″	h m		h m		h m	°	°
20. 58	20. 32. 50							
21. 12	32. 20							
21. 36	34. 0							
21. 43	34. 0							
21. 53	34. 45							
21. 59	34. 10							
22. 4	34. 45							
22. 7	33. 15							
22. 14	34. 30							
22. 26	34. 20							
23. 0	38. 25							
23. 11	37. 50							
23. 48	39. 30							
23. 59	41. 20							
Aug.20		Aug.20		Aug.20		Aug.20		
0. 0	20. 41. 20	0. 0	·1376	0. 0	·02669	Min.	63 ·9	65 ·9
0. 24	40. 20	0. 4	·1381	0. 28	·02670	1. 0	64 ·2	66 ·3
0. 28	39. 25	0. 20	·1368	1. 38	·02722	8. 0	65 ·1	67 ·2
0. 43	39. 20	0. 26	·1371		....	Max.	65 ·5	67 ·4
0. 50	37. 45	0. 29	·1362	3. 34	·02740	21. 0	65 ·1	67 ·0
1. 7	36. 55	0. 40	·1362	4. 3	·02767			
1. 15	39. 0	1. 4	·1375	4. 18	·02756			
1. 26	38. 0	1. 8	·1371	7. 5	·02766			
1. 35	38. 40	1. 17	·1385	7. 30	·02752			
1. 39	37. 30	1. 26	·1373	8. 55	·02763			
2. 6	39. 30	1. 37	·1379	9. 33	·02763			
2. 14	38. 45	1. 40	·1375	9. 52	·02749			
2. 39	40. 0	1. 53	·1383	11. 31	·02736			
2. 45	38. 5	2. 12	·1377	11. 59	·02723			
2. 54	39. 20	2. 22	·1374	14. 30	·02745			
3. 6	38. 35	2. 30	·1378	15. 16	·02700			
3. 11	39. 45	2. 49	·1374	15. 40	·02691			
3. 15	38. 5	2. 58	·1384	17. 57	·02772			
3. 26	37. 0	3. 6	·1384	19. 53	·02772			
3. 38	33. 10	3. 14	·1390	23. 59	·02770			
3. 50	32. 50	3. 41	·1376					
4. 1	34. 5	4. 4	·1394					
4. 11	35. 10	4. 16	·1389					
4. 25	33. 35	4. 26	·1380					
4. 44	34. 20	4. 44	·1386					
5. 11	33. 30	4. 49	·1384					
5. 28	33. 15	5. 5	·1386					
5. 43	33. 20	5. 18	·1377					
6. 9	30. 50	5. 30	·1375					
6. 24	32. 0	5. 37	·1377					
6. 28	31. 40	6. 5	·1376					
6. 52	33. 0	6. 21	·1385					
7. 2	33. 0	6. 30	·1383					
7. 23	33. 25	7. 10	·1389					
7. 32	31. 10	7. 34	·1384					
7. 43	32. 0	7. 49	·1390					
7. 56	31. 50	8. 26	·1379					
8. 2	31. 20	8. 48	·1383					
8. 23	31. 30	9. 10	·1378					
8. 28	30. 30	9. 26	·1379					
8. 56	31. 25	9. 39	·1387					
9. 3	30. 55	9. 50	·1385					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 20		Aug. 20						
h. m.	° ′ ″	h. m.		h. m.		h. m.	°	°
9. 38	20. 32. 45	10. 41	·1361					
9. 46	31. 45	11. 10	·1358					
9. 50	32. 0	11. 41	·1358					
10. 4	32. 0	12. 25	·1384					
10. 33	34. 20	13. 6	·1386					
10. 42	33. 45	13. 15	·1381					
10. 53	32. 10	14. 19	·1372					
11. 12	30. 40	14. 34	·1377					
11. 28	31. 0	14. 57	·1404					
11. 53	31. 50	15. 21	·1394					
12. 11	33. 50	15. 39	·1392					
12. 17	32. 35	15. 43	·1394					
12. 39	32. 0	16. 4	·1389					
13. 2	29. 50	16. 42	·1370					
13. 14	30. 15	17. 4	·1367					
13. 29	29. 30	17. 14	·1363					
13. 47	29. 30	17. 42	·1362					
14. 14	37. 30	17. 51	·1357					
14. 28	38. 25	17. 59	·1363					
14. 46	45. 0	18. 42	·1365					
15. 11	38. 0	19. 6	·1362					
15. 38	32. 0	19. 13	·1354					
15. 52	31. 50	19. 26	·1358					
16. 14	27. 30	20. 5	·1346					
16. 37	26. 45	20. 14	·1347					
17. 0	28. 0	20. 36	·1336					
17. 9	27. 45	20. 53	·1337					
17. 30	28. 20	21. 2	·1338					
17. 41	27. 55	21. 11	·1335					
17. 52	29. 50	21. 22	·1338					
17. 56	27. 45	21. 50	·1330					
	***	22. 13	·1353					
18. 26	27. 0	22. 57	·1362					
18. 42	27. 55	23. 12	·1365					
18. 56	26. 20	23. 34	·1364					
	***	23. 59	·1376					
19. 9	28. 30							
19. 26	28. 30							
19. 39	31. 0							
20. 8	31. 0							
20. 14	32. 5							
20. 30	32. 5							
21. 2	35. 0							
21. 16	37. 30							
21. 43	38. 5							
22. 1	35. 10							
22. 14	38. 0							
22. 51	38. 55							
23. 9	38. 45							
23. 19	40. 5							
23. 35	39. 30							
23. 59	41. 10							
Aug. 21		Aug. 21		Aug. 21		Aug. 21		
0. 0	20. 41. 10	0. 0	·1376	0. 0	·02770	1. 0	65·6	67·1
0. 23	40. 35	0. 11	·1373	2. 40	·02824	3. 0	65·7	66·9
0. 27	41. 40	0. 20	·1378	4. 43	·02832	Max.	66·1	66·0
0. 43	41. 40	0. 36	·1380	6. 53	·02853	9. 0	63·6	66·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 21		Aug. 21		Aug. 21		Aug. 21		
h. m.	° ′ ″	h. m.		h. m.		h. m.	°	°
0. 58	20. 40. 35	0. 51	·1378	7. 19	·02837	Min.	62·6	65·0
1. 28	39. 30	1. 17	·1381	8. 30	·02841	21. 0	64·4	65·0
1. 43	39. 30	1. 27	·1379	10. 23	·02792			
2. 9	37. 50	1. 51	·1386	11. 9	·02753			
3. 30	34. 0	2. 6	·1383	13. 4	·02729			
3. 43	34. 0	2. 15	·1384	13. 59	·02737			
4. 58	32. 30	3. 40	·1380	17. 22	·02729			
5. 9	32. 5	4. 6	·1378	19. 31	·02748			
5. 22	32. 30	5. 10	·1376	22. 8	·02745			
5. 28	32. 10	5. 18	·1382	23. 59	·02732			
5. 41	32. 10	5. 25	·1380					
5. 57	31. 25	5. 45	·1388					
6. 11	32. 20	5. 56	·1377					
6. 24	31. 0	6. 1	·1378					
6. 56	33. 0	6. 10	·1382					
7. 11	33. 0	6. 19	·1385					
7. 53:	30. 15	6. 41	·1379					
8. 14	31. 30	6. 50	·1380					
8. 45	32. 5	7. 25	·1373					
8. 58	32. 5	7. 35	·1378					
9. 12	32. 30	8. 18	·1376					
9. 39	32. 10	8. 29	·1377					
9. 57	30. 10	8. 46	·1376					
10. 2	30. 5	8. 56	·1380					
10. 14	27. 25	9. 25	·1377					
10. 29	27. 40	9. 46	·1384					
10. 39	26. 30	9. 55	·1379					
10. 54	28. 25	10. 12	·1382					
11. 8	28. 50	10. 44	·1404					
11. 17	28. 20	11. 12	·1389					
11. 54	29. 35	11. 21	·1395					
12. 11	28. 50	11. 42	·1382					
12. 26	27. 25	11. 54	·1384					
12. 54	27. 25	12. 11	·1380					
13. 8	26. 5	12. 23	·1382					
13. 24	26. 5	12. 52	·1374					
13. 45	30. 0	13. 7	·1374					
13. 58	30. 50	13. 25	·1368					
14. 9	32. 10	13. 45	·1368					
14. 26	31. 0	13. 49	·1366					
14. 37	32. 30	14. 4	·1373					
14. 54	31. 50	14. 12	·1368					
15. 0	33. 20	14. 34	·1372					
15. 12	32. 0	14. 58	·1376					
15. 27	32. 20	15. 11	·1373					
15. 56	30. 30	16. 9	·1379					
16. 3	30. 30	16. 24	·1377					
16. 26	29. 10	16. 38	·1378					
16. 37	29. 35	16. 52	·1376					
16. 56	28. 50	17. 22	·1378					
17. 10	29. 30	17. 27	·1375					
17. 18	29. 30	18. 1	·1378					
17. 25	29. 0	18. 13	·1372					
17. 42	29. 10	18. 39	·1366					
18. 26	29 40	19. 12	·1367					
18. 53	29. 5	19. 21	·1363					
19. 22	28. 30	19. 29	·1366					
19. 43	29. 50	19. 50	·1363					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.21		Aug.21						
h m	° ′ ″	h m		h m		h m	°	°
20. 2	20. 30. 20	20. 12	·1358					
20. 41	30. 0	20. 33	·1355					
21. 33	31. 35	22. 4	·1356					
21. 39	31. 0	22. 21	·1356					
22. 53	35. 0	22. 57	·1355					
23. 14	37. 20	23. 17	·1356					
23. 27	37. 35	23. 41	·1347					
23. 34	36. 50	23. 49	·1348					
23. 45	36. 35		(†)					
23. 59	37. 30							
Aug. 22		Aug. 22		Aug.22		Aug.22		
0. 0	20. 37. 30		(†)	0. 0	·02732	1. 0	65 ·3	67 ·2
0. 11	37. 30	0. 5	·1355	1. 3	·02751	3. 0	65 ·7	67 ·8
0. 50	40. 30	0. 29	·1371	4. 32	·02837	Max.	66 ·3	68 ·4
1. 4	38. 45	0. 52	·1379	4. 51	·02872	9. 0	65 ·8	68 ·0
1. 9	40. 50	1. 3	·1368	5. 51	·02837	Min.	64 ·9	66 ·2
1. 25	40. 45	1. 22	·1376	9. 3	·02832	21. 0	65 ·1	66 ·9
1. 59	38. 20	1. 27	·1372	9. 51	·02784	22. 0	65 ·3	67 ·0
2. 5	38. 50	1. 40	·1375	10. 18	·02791	23. 0	65 ·5	67 ·0
2. 13	38. 15	2. 7	·1367	10. 42	·02780			
2. 24	39. 0	2. 13	·1371	11. 33	·02792			
2. 29	39. 0		**	17. 33	·02754			
2. 43	37. 5	2. 29	·1377	18. 37	·02775			
3. 4	37. 30	2. 43	·1370	23. 59	·02756			
3. 12	37. 5	3. 18	·1391					
3. 23	36. 30	3. 29	·1383					
3. 39	37. 50	3. 42	·1388					
3. 57	38. 0	3. 55	·1386					
4. 9	36. 30	4. 4	·1389					
4. 22	33. 35	4. 12	·1378					
4. 31	29. 30	4. 17	·1374					
4. 40	28. 50	4. 26	·1358					
5. 0	31. 50	4. 54	·1402					
5. 32	33. 25	5. 16	·1387					
6. 3	33. 5	5. 52	·1377					
6. 18	33. 30	6. 18	·1384					
6. 39	32. 55	7. 29	·1374					
7. 8	32. 30	7. 44	·1379					
7. 14	32. 30	8. 10	·1378					
7. 29	30. 25	8. 25	·1379					
7. 44	32. 25	8. 42	·1386					
7. 57	32. 25	9. 5	·1382					
8. 11	33. 20	9. 14	·1399					
8. 22	32. 40	9. 33	·1392					
8. 39	32. 30	9. 56	·1370					
8. 54	33. 25	10. 19	·1381					
9. 9	30. 0	11. 11	·1375					
9. 25	33. 0	11. 40	·1380					
9. 38	34. 55	12. 24	·1376					
9. 53	32. 30	12. 43	·1379					
9. 57	32. 0	13. 39	·1374					
10. 10	33. 30	14. 12	·1378					
10. 23	33. 25	15. 26	·1374					
10. 40	32. 0	15. 49	·1376					
10. 47	32. 0	16. 5	·1373					
11. 29	31. 0	16. 32	·1377					
11. 53	31. 5	17. 21	·1379					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 22		Aug.22						
h m	° ′ ″	h m		h m		h m	°	°
12. 41	20. 33. 25	17. 39	·1373					
13. 16	32. 20	18. 4	·1370					
13. 31	32. 35		***					
13. 54	34. 50	19. 54	·1365					
14. 26	32. 55	20. 12	·1366					
14. 41	32. 30	21. 40	·1356					
14. 53	33. 0	21. 52	·1357					
15. 6	32. 30	22. 3	·1356					
15. 24	32. 10	22. 42	·1362					
15. 38	33. 25	22. 56	·1359					
15. 52	31. 40	23. 12	·1364					
16. 12	32. 35	23. 35	·1361					
16. 23	32. 10	23. 43	·1364					
16. 42	32. 50	23. 59	·1362					
17. 9	31. 20							
17. 26	31. 25							
17. 44	29. 20							
18. 31	30. 45							
18. 54	29. 55							
19. 9	30. 35							
19. 15	30. 30							
19. 26	31. 15							
19. 38	30. 30							
19. 48	30. 40							
19. 58	29. 40							
21. 10	31. 30							
21. 58	33. 25							
22. 10	33. 10							
22. 39	34. 40							
22. 56	34. 40							
23. 14	36. 40							
23. 36	37. 0							
23. 48	38. 20							
23. 59	38. 50							
Aug. 23		Aug. 23		Aug.23		Aug.23		
0. 0	20. 38. 50	0. 0	·1362	0. 0	·02756	0. 0	65 ·6	67 ·2
1. 13	40. 0	0. 18	·1365	4. 30	·02819	1. 0	65 ·6	67 ·7
1. 30	38. 35	0. 40	·1360	6. 8	·02808	3. 0	65 ·6	67 ·0
1. 41	39. 5	1. 16	·1366	8. 48	·02813	Max.	65 ·9	67 ·7
2. 30	37. 5	1. 30	·1363	11. 9	·02768	9. 0	65 ·0	67 ·6
2. 43	37. 30	1. 40	·1366	15. 27	·02793	Min.	64 ·0	66 ·7
3. 18	36. 25	1. 46	·1362	18. 37	·02796	21. 0	64 ·9	67 ·2
3. 26	36. 50	2. 25	·1372	22. 5	·02755	22. 0	64 ·8	67 ·1
3. 39	35. 40	3. 4	·1383	23. 2	·02748	23. 0	64 ·9	67 ·1
4. 8	35. 30	3. 20	·1380	23. 59	·02752			
4. 27	34. 30	3. 29	·1384					
4. 38	34. 30	3. 44	·1378					
4. 54	33. 55	3. 54	·1378					
5. 44	32. 40	4. 13	·1386					
5. 56	33. 5	4. 26	·1382					
6. 8	32. 30	4. 40	·1385					
6. 27	32. 45	4. 52	·1379					
6. 38	32. 10	5. 4	·1377					
6. 43	32. 45	5. 14	·1379					
7. 11	32. 5	5. 34	·1378					
7. 23	33. 10	5. 42	·1378					
7. 26	32. 0	6. 3	·1385					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 23		Aug. 23						
h m	° ′ ″	h m		h		h m		°
7. 31	20. 32. 35	6. 26	·1378					
7. 43	30. 50	6. 41	·1380					
7. 54	31. 45	7. 8	·1379					
7. 57	31. 0	7. 21	·1382					
8. 9	31. 30	7. 40	·1375					
8. 29	28. 25	7. 50	·1381					
8. 54	31. 30	8. 5	·1380					
9. 8	28. 50	8. 19	·1373					
9. 25	29. 55	8. 40	·1378					
9. 40	29. 5	8. 50	·1376					
9. 57	27. 0	9. 13	·1389					
10. 13	29. 50	9. 46	·1384					
10. 32	29. 50	10. 6	·1391					
10. 43	28. 50	10. 22	·1380					
10. 58	29. 30	10. 43	·1377					
11. 12	28. 50	10. 52	·1378					
11. 32	30. 0	11. 14	·1373					
11. 55	31. 10	12. 55	·1370					
12. 27	30. 15	13. 14	·1373					
12. 48	31. 5	13. 28	·1369					
12. 58	32. 10	14. 27	·1374					
14. 17	32. 40	16. 16	·1373					
15. 17	31. 30	16. 29	·1376					
15. 27	32. 25	16. 43	·1372					
15. 53	31. 30	16. 57	·1374					
16. 7	31. 30	17. 8	·1373					
16. 23	32. 25	17. 28	·1374					
16. 45	32. 0	17. 55	·1366					
16. 56	30. 30	18. 20	·1367					
17. 11	30. 55	18. 56	·1362					
17. 26	30. 30	19. 18	·1362					
17. 39	30. 30	19. 41	·1365					
17. 56	32. 35	20. 20	·1363					
18. 8	32. 10	20. 43	·1360					
18. 15	32. 20	21. 26	·1361					
18. 53	35. 25	21. 51	·1358					
18. 59	35. 10	22. 20	·1366					
19. 11	35. 10	23. 6	·1363					
19. 15	35. 30	23. 59	·1364					
19. 31	34. 25							
19. 40	34. 25							
20. 6	32. 10							
20. 16	32. 20							
20. 33	31. 25							
21. 9	32. 0							
21. 12	31. 15							
21. 45	32. 45							
22. 0	31. 40							
22. 41	34. 30							
23. 44	37. 35							
23. 59	38. 0							
Aug. 24		Aug. 24		Aug. 24		Aug. 24		
0. 0	20. 38. 0	0. 0	·1364	0. 0	·02752	0. 0	65·3	67·8
0. 10	38. 20	0. 31	·1367	4. 18	·02809	1. 0	65·6	67·0
0. 26	40. 5	0. 54	·1366	5. 29	·02824	2. 0	65·9	68·0
0. 30	39. 50	2. 32	·1372	10. 1	·02819	3. 0	65·6	68·1
0. 58	39. 50	3. 40	·1375	10. 27	·02810	Max.	66·4	69·1

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 24		Aug. 24		Aug. 24		Aug. 24		
h m	° ′ ″	h m		h m		h m	°	°
1. 30	20. 40. 30	4. 5	·1372	10. 52	·02791	9. 0	66·4	69·0
2. 55	38. 50	4. 38	·1383	12. 23	·02766	Min.	63·0	66·2
4. 11	36. 35	4. 56	·1384	16. 48	·02737	21. 0	64·7	67·1
4. 30	36. 40	5. 8	·1380	18. 16	·02762			
5. 25	33. 45	5. 13	·1382	21. 38	·02757			
6. 9	32. 50	5. 25	·1376	22. 15	·02732			
6. 23	33. 10	5. 40	·1378	22. 41	·02732			
7. 0	32. 0	5. 49	·1378	23. 59	·02762			
7. 17	32. 0	6. 4	·1372					
7. 33	32. 40	6. 39	·1380					
7. 54	32. 15	6. 53	·1378					
8. 25	33. 10	7. 56	·1384					
8. 44	32. 10	8. 14	·1381					
9. 28	32. 35	8. 24	·1383					
9. 44	31. 50	8. 50	·1379					
10. 6	32. 30	9. 4	·1384					
10. 18	31. 40	9. 44	·1378					
10. 53	32. 30	9. 57	·1381					
11. 10	30. 20	10. 10	·1379					
11. 35	31. 0	10. 21	·1383					
11. 43	31. 35	10. 30	·1382					
12. 11	30. 25	10. 43	·1396					
12. 56	30. 35	11. 8	·1386					
13. 11	31. 35	11. 18	·1388					
13. 23	31. 20	12. 14	·1380					
13. 40	31. 50	12. 44	·1378					
14. 5	30. 45	13. 26	·1387					
14. 45	31. 50	13. 48	·1382					
15. 1	31. 10	14. 12	·1385					
15. 15	32. 0	14. 51	·1384					
15. 29	30. 20	15. 5	·1388					
16. 12	30. 0	15. 42	·1384					
16. 42	30. 20	16. 9	·1386					
17. 9	29. 35	17. 39	·1380					
17. 26	30. 40	17. 49	·1378					
17. 53	29. 40	18. 18	·1370					
17. 58	30. 30	18. 42	·1366					
18. 41	33. 20	18. 57	·1369					
18. 53	32. 35	19. 21	·1360					
19. 23	35. 0	19. 54	·1371					
19. 35	37. 0	20. 3	·1368					
19. 41	36. 10	20. 18	·1369					
19. 56	35. 10	20. 56	·1364					
19. 58	35. 50	21. 11	·1364					
20. 13	33. 0	21. 41	·1361					
20. 33	32. 30	22. 2	·1354					
20. 42	31. 0	22. 28	·1358					
21. 8	31. 0	22. 44	·1354					
21. 33	33. 5	23. 3	·1358					
21. 57	33. 0	23. 26	·1354					
22. 24	34. 10	23. 59	·1366					
22. 41	35. 35							
22. 56	35. 35							
23. 2	38. 10							
23. 11	37. 15							
23. 27	37. 25							
23. 52	38. 30							
23. 59	39. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 25		Aug. 25		Aug. 25		Aug. 25		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 39. 0	0. 0	·1366	0. 0	·02762	1. 0	65·1	67·6
0. 9	38. 50	0. 10	·1367	2. 7	·02803	3. 0	65·6	67·6
0. 14	39. 10	0. 37	·1369	6. 7	·02822	Max.	66·2	68·2
0. 40	38. 30	1. 10	·1377	6. 24	·02817	9. 0	64·8	67·0
0. 58	38. 30	1. 48	·1375	9. 1	·02834	Min.	62·7	65·4
1. 11	39. 35	2. 24	·1380	10. 7	·02783	21. 0	64·6	66·3
1. 37	39. 0	2. 32	·1378	11. 25	·02767			
1. 41	39. 50	2. 59	·1378	12. 7	·02738			
1. 53	38. 35	3. 35	·1384	13. 4	·02729			
2. 23	38. 35	4. 2	·1383	17. 31	·02710			
2. 26	38. 5	4. 12	·1384	20. 40	·02724			
2. 38	38. 5	4. 43	·1382	21. 3	·02702			
3. 23	36. 5	5. 24	·1383	22. 9	·02702			
4. 22	33. 5	5. 32	·1379	22. 13	·02718			
4. 57	31. 35	5. 56	·1379	22. 24	·02686			
5. 10	31. 40	6. 11	·1383	22. 46	·02710			
5. 25	32. 35	6. 19	·1379	22. 59	·02682			
5. 42	32. 0	6. 46	·1370	23. 59	·02721			
6. 25	32. 20	7. 14	·1379					
6. 38	32. 35	7. 50	·1378					
6. 42	32. 20	8. 6	·1373					
6. 56	30. 30	8. 20	·1371					
7. 13	30. 10	8. 33	·1375					
7. 30	30. 55	9. 25	·1374					
7. 41	30. 40	9. 50	·1386					
7. 56	31. 20	10. 8	·1383					
8. 8	30. 30	10. 37	·1378					
8. 46	31. 30	10. 56	·1385					
8. 55	30. 40	11. 13	·1378					
9. 10	30. 40	11. 36	·1385					
9. 34	28. 25	11. 53	·1382					
9. 56	31. 15	12. 5	·1386					
10. 9	31. 0	12. 14	·1384					
10. 32	29. 30	12. 30	·1385					
10. 58	30. 20	13. 11	·1380					
11. 7	30. 0	13. 36	·1381					
11. 13	30. 10	14. 15	·1376					
11. 34	32. 50	15. 54	·1380					
12. 0	33. 40	16. 58	·1386					
12. 11	31. 45	17. 27	·1381					
12. 56	27. 30	18. 10	·1383					
13. 31	29. 30	18. 54	·1379					
13. 57	28. 20	19. 25	·1372					
14. 23	28. 20	19. 46	·1366					
14. 40	28. 55	20. 11	·1373					
16. 4	29. 50	20. 52	·1368					
16. 43	28. 35	21. 23	·1327					
16. 56	28. 50	21. 30	·1339					
16. 58	28. 25	21. 34	·1337					
17. 23	29. 35	21. 44	·1361					
17. 40	29. 35	21. 57	·1337					
18. 10	31. 0	22. 6	·1342					
18. 22	30. 20	22. 18	·1352					
18. 28	30. 20	22. 26	·1374					
18. 39	29. 30	22. 40	·1347					
18. 55	28. 30	22. 49	·1364					
19. 28	29. 15	23. 2	·1378					
19. 46	29. 0	23. 10	·1352					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 25		Aug. 25						
h m	° ′ ″	h m		h m		h m	°	°
20. 15	20. 31. 50	23. 18	·1360					
20. 46	31. 30	23. 26	·1353					
20. 56	36. 10	23. 34	·1346					
21. 14	31. 40	23. 59	·1353					
21. 28	31. 0							
21. 39	29. 10							
21. 54	33. 50							
22. 1	31. 0							
22. 26	32. 50							
22. 33	36. 40							
22. 43	34. 0							
23. 9	42. 10							
23. 16	34. 15							
23. 28	37. 35							
23. 55	39. 0							
23. 59	44. 20							
Aug. 26		Aug. 26		Aug. 26		Aug. 26		
0. 0	20. 44. 20	0. 0	·1353	0. 0	·02721	1. 0	63·3	67·2
0. 10	42. 50	0. 5	·1343	0. 53	·02732	3. 0	65·3	67·4
0. 14	46. 0	0. 15	·1348	2. 15	·02778	Max.	65·6	68·1
0. 23	45. 30	0. 27	·1349	2. 26	·02801	9. 0	63·1	66·0
0. 27	44. 35	0. 35	·1358	2. 34	·02786	Min.	57·7	60·1
0. 41	44. 35	0. 47	·1356	3. 9	·02858	21. 0	61·6	63·9
1. 3	41. 0	0. 56	·1363	3. 23	·02836			
1. 27	41. 35	1. 4	·1358	3. 28	·02868			
1. 33	42. 50	1. 29	·1377	4. 10	·02973			
1. 39	42. 0	1. 41	·1385	4. 44	·02998			
1. 54	42. 0	1. 49	·1385	4. 47	·03032			
1. 58	41. 0	2. 1	·1367	4. 53	·03060			
2. 24	44. 15	2. 14	·1358	4. 56	·03047			
2. 30	44. 15	2. 27	·1367	5. 0	·03075			
2. 38	44. 50	2. 40	·1379	5. 14	·03038			
2. 41	42. 50	2. 49	·1368	5. 35	·03057			
	(†)	3. 4	·1376	5. 40	·03048			
3. 0	47. 56*	3. 12	·1379	6. 1	·03019			
3. 26	44. 30	3. 23	·1400	6. 12	·03026			
3. 43	42. 50	3. 30	·1381	6. 23	·03011			
3. 58	37. 30	3. 38	·1355	6. 31	·03052			
4. 11	37. 15	3. 43	·1363	6. 53	·02935			
4. 22	36. 0	4. 4	·1345	7. 26;	·02872			
4. 26	31. 5	4. 19	·1373	8. 19	·02868			
4. 33	31. 0	4. 37	·1365	8. 56	·02853			
4. 43	34. 30	4. 50	·1377	9. 43	·02802			
4. 54	37. 10	4. 51	·1374	9. 56	·02771			
4. 57	42. 15	4. 53	·1381	10. 6	·02771			
4. 58	34. 30	4. 56	·1366	10. 34	·02655			
5. 9	37. 25	5. 5	·1371	11. 2	·02676			
5. 13	32. 0	5. 11	·1367	11. 34;	·02638			
5. 24	30. 50	5. 24	·1379	11. 59	·02638			
5. 28	35. 25	5. 30	·1367	12. 24	·02607			
5. 31	35. 25	5. 35	·1367	13. 1	·02592			
5. 38	37. 50	5. 43	·1340	13. 52;	·02631			
5. 43	30. 40	6. 4	·1384	14. 28	·02573			
5. 53	31. 0	6. 25	·1357	15. 27	·02602			
6. 8	36. 45	6. 38	·1364	16. 58	·02556			
6. 11	35. 30	6. 40	·1342	18. 27	·02563			
6. 14	32. 30	6. 45	·1365	18. 34	·02551			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 26		Aug. 26		Aug. 26				
h m	° ′ ″	h m		h m		h m	°	°
6. 38	20. 33. 30	6. 51	·1364	18. 56	·02563			
6. 40	18. 15	6. 55	·1394	19. 11	·02549			
6. 44	19. 25	7. 4	·1370	19. 24	·02571			
6. 53	16. 10	7. 10	·1373	19. 44	·02573			
6. 58	31. 40	7. 20	·1373	20. 3	·02564			
7. 7	30. 10	7. 39	·1364	22. 1	·02588			
7. 13	33. 20	7. 50	·1361	23. 6	·02578			
7. 22	33. 10	7. 57	·1364	23. 59	·02606			
7. 28	34. 30	8. 10	·1360					
7. 41	35. 10	8. 21	·1371					
7. 52	33. 50	8. 30	·1369					
7. 59	31. 30	8. 49	·1364					
8. 4	31. 20	9. 9	·1354					
8. 14	28. 30	9. 20	·1357					
8. 32	32. 55	9. 26	·1363					
8. 43	34. 0	9. 37	·1357					
8. 55	32. 20	9. 55	·1367					
9. 9	33. 30	10. 4	·1353					
9. 23	30. 40	10. 26	·1396					
9. 57	30. 30	10. 37	·1377					
10. 4	25. 0	10. 49	·1326					
10. 9	25. 0	11. 11	·1356					
10. 18	27. 40	11. 20	·1348					
10. 26	26. 15	11. 25:	·1352					
10. 38	27. 40	11. 56	·1341					
10. 53	10. 15	12. 12	·1344					
11. 13	22. 10	12. 35	·1329					
11. 18	22. 30	12. 56	·1347					
11. 32	26. 20	13. 10	·1362					
11. 53	23. 30	13. 41	·1362					
12. 4	23. 30	13. 50	·1359					
12. 25	28. 10	14. 0	·1366					
12. 55	29. 20	14. 32	·1356					
12. 58	28. 5	14. 56	·1361					
13. 16	23. 50	15. 33	·1359					
13. 41	30. 30	16. 3	·1371					
	***	16. 26	·1370					
14. 14	34. 5	16. 38	·1367					
14. 41	29. 25	16. 43	·1371					
14. 53	28. 5	17. 35	·1369					
14. 58	29. 30	17. 41	·1364					
15. 7	29. 30	17. 56	·1372					
15. 25	34. 0	18. 9	·1367					
15. 30	34. 0	18. 12	·1369					
15. 38	33. 15	18. 20	·1365					
15. 42	34. 25	18. 40	·1355					
15. 52	32. 30	18. 44	·1338					
15. 56	33. 5	18. 54	·1342					
15. 57	31. 35	18. 56	·1340					
16. 4	32. 25	19. 19	·1303					
16. 11	31. 30	19. 21	·1299					
16. 27	31. 15	19. 26	·1319					
16. 38	28. 50	19. 45	·1335					
16. 42	29. 40	19. 55	·1346					
17. 25	29. 0	20. 12	·1341					
17. 38	31. 50	20. 17	·1344					
17. 42	28. 0	20. 24	·1339					
17. 46	29. 5	20. 48	·1346					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 26		Aug. 26						
h m	° ′ ″	h m		h m		h m	°	°
17. 53	20. 28. 0	21. 12	·1342					
17. 57	29. 15	21. 21	·1347					
18. 3	29. 15	21. 34	·1344					
18. 9	27. 0	21. 54	·1348					
18. 13	29. 40	22. 2	·1355					
18. 22	27. 30	22. 42	·1356					
18. 28	29. 30	23. 12	·1359					
18. 41	33. 45	23. 48	·1353					
18. 43	29. 25	23. 59	·1358					
18. 53	32. 10							
18. 56	30. 55							
19. 9	38. 30							
19. 15	38. 30							
19. 23	36. 30							
19. 28	38. 25							
19. 56	41. 45							
20. 9	38. 0							
20. 22	38. 50							
20. 28	38. 25							
20. 41	40. 15							
20. 58	39. 30							
21. 12	36. 50							
21. 19	36. 35							
21. 41	32. 50							
21. 55	32. 10							
22. 9	33. 0							
22. 42	35. 10							
23. 9	36. 0							
23. 22	35. 45							
23. 28	35. 45							
23. 43	37. 0							
23. 50	37. 0							
23. 59	37. 10							
Aug. 27		Aug. 27		Aug. 27		Aug. 27		
0. 0	20. 37. 10	0. 0	·1358	0. 0	·02606	Min.	63·1	65·1
0. 43	38. 20	0. 15	·1362	0. 44	{·02626	0. 0	63·1	65·1
0. 58	37. 50	0. 29	·1370		·02751	8. 0	64·8	67·4
1. 1	36. 30	0. 31	·1366	3. 16	·02793	Max.	65·5	68·2
1. 12	37. 10	0. 37	·1372	5. 43	·02813	21. 0	65·3	67·5
1. 39	36. 25	0. 45	·1363	9. 23	·02849			
1. 48	35. 50	1. 4	·1375	14. 34	·02844			
1. 56	35. 20	1. 13	·1373	17. 41	·02850			
2. 13	35. 10	1. 38	·1375	20. 2:	·02871			
2. 24	34. 50	1. 43	·1371	23. 59	·02866			
2. 40	35. 5	1. 59	·1375					
2. 43	34. 0	2. 11	·1371					
2. 59	33. 20	2. 22	·1375					
3. 9	33. 50	2. 27	·1372					
3. 26	32. 5	2. 38	·1377					
3. 39	32. 20	2. 46	·1371					
4. 30	31. 10	2. 59	·1377					
5. 44	30. 15	3. 8	·1371					
6. 15	30. 5	3. 22	·1368					
6. 46	30. 35	3. 38	·1378					
7. 39	30. 25	3. 49	·1375					
8. 12	30. 35	5. 24	·1377					
8. 29	30. 15	5. 30	·1375					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 27		Aug. 27						
h m	° ′ ″	h m		h m		h m	°	°
8. 40	20. 30. 40	6. 42	·1377					
10. 8	30. 50	7. 29	·1374					
10. 43	30. 30	7. 41	·1376					
10. 54	30. 45	8. 25	·1372					
11. 56	31. 5	10. 57	·1371					
11. 59	30. 55	12. 44	·1373					
13. 12	31. 20	13. 9	·1375					
13. 43	31. 40	13. 25	·1372					
14. 6	31. 40	16. 56	·1377					
14. 23	31. 10		* * *					
14. 29	31. 25	18. 37	·1376					
14. 58	30. 20	19. 29	·1371					
15. 9	30. 20	20. 11	·1362					
15. 38:	30. 50	22. 23	·1356					
15. 53	29. 35	23. 34	·1361					
16. 15	30. 20	23. 59	·1361					
16. 33	29. 35							
16. 54	29. 10							
16. 57	28. 45							
17. 8	29. 5							
	* * *							
17. 39	28. 50							
17. 43	28. 10							
17. 53	29. 40							
18. 2	28. 30							
18. 42	28. 40							
18. 47	28. 10							
19. 9	28. 30							
19. 28	28. 30							
19. 38	27. 55							
	* * *							
19. 59	28. 50							
20. 9	28. 0							
20. 41	29. 25							
21. 0	28. 35							
21. 39	32. 0							
22. 1	31. 55							
22. 35	33. 0							
23. 8	34. 30							
23. 43	36. 5							
23. 59	36. 25							
Aug. 28		Aug. 28		Aug. 28		Aug. 28		
0. 0	20. 36. 25	0. 0	·1361	0. 0	·02866	1. 0	66·5	68·3
1. 8	39. 5	0. 49	·1365	2. 10	·02906	3. 0	66·2	68·5
1. 55	38. 0	0. 53	·1370	4. 28	·02937	Max.	66·8	69·2
2. 16	38. 0	1. 33	·1368	9. 3	·02949	9. 0	65·6	68·0
3. 23	35. 55	2. 19	·1373	11. 10	·02923	Min.	64·0	66·0
3. 43	35. 10	2. 41	·1370	13. 33	·02904	21. 0	64·5	66·4
3. 54	34. 50	3. 49	·1376	14. 9	·02892			
5. 42	30. 45	3. 55	·1373	16. 6	·02884			
5. 53	30. 55	5. 14	·1378	16. 51	·02877			
6. 6	30. 25	5. 48	·1376	18. 33:	·02896			
6. 10	30. 40	6. 10	·1380	20. 11	·02889			
6. 32	29. 30	6. 20	·1377	22. 55	·02811			
6. 46	29. 25	6. 49	·1380	23. 59	·02808			
7. 7	30. 30	7. 45	·1379					
7. 26	30. 20	9. 50	·1383					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 28		Aug. 28						
h m	° ′ ″	h m		h m		h m	°	°
8. 8	20. 31. 0	9. 53	·1390					
8. 56	31. 0	10. 26	·1385					
9. 13	30. 50	10. 40	·1388					
9. 28	31. 0	11. 1	·1390					
9. 43	30. 50	11. 49	·1378					
10. 1	31. 10	12. 53	·1384					
10. 26	29. 45	13. 14	·1382					
10. 48	30. 0	13. 33	·1387					
10. 56	29. 0	14. 18	·1385					
11. 0	29. 0	14. 52	·1380					
11. 9	27. 35	15. 57	·1378					
11. 25	27. 35	16. 25	·1382					
11. 43	29. 10	17. 5	·1378					
12. 26	30. 30	17. 20	·1381					
12. 54	31. 30	17. 50	·1377					
13. 8	31. 15	18. 25	·1379					
13. 23	34. 0	21. 26	·1354					
13. 39	34. 35		* * *					
14. 13	30. 50	22. 22	·1358					
14. 38	30. 0	22. 40	·1357					
15. 11	30. 0		* * *					
15. 32	29. 35	23. 59	·1368					
15. 59	30. 5							
16. 14	30. 45							
16. 28	30. 0							
16. 50	30. 0							
17. 11	29. 30							
17. 44	28. 0							
17. 52	27. 30							
17. 58	27. 50							
18. 42	26. 55							
19. 24	25. 35							
19. 28	25. 50							
19. 55	25. 30							
20. 11	25. 50							
20. 26	25. 50							
21. 56	29. 30							
22. 26	31. 30							
22. 38	31. 30							
23. 14	34. 15							
23. 20	34. 35							
23. 36	35. 20							
23. 59	37. 15							
Aug. 29		Aug. 29		Aug. 29		Aug. 29		
0. 0	20. 37. 15	0. 0	·1368	0. 0	·02808	1. 0	64·5	66·1
0. 19	37. 25	0. 13	·1367	2. 29	·02819	Max.	64·8	66·2
0. 43	39. 30	0. 44	·1370	5. 46	·02807	3. 0	62·7	64·8
1. 8	39. 20	1. 7	·1375	6. 10	·02790	9. 0	61·3	63·3
1. 15	39. 40	1. 23	·1372	6. 45	·02780	Min.	60·5	63·0
1. 38	38. 30	1. 33	·1375	10. 39	·02741	21. 0	63·4	64·7
1. 42	37. 15	1. 40	·1366	12. 11	·02741	22. 0	63·3	64·8
1. 57	37. 30	2. 9	·1367	12. 22	·02732	23. 0	63·4	64·9
2. 23	36. 30	2. 24	·1374	14. 13	·02725			
2. 26	36. 50	2. 36	·1372	14. 49	·02701			
2. 56	34. 30	3. 29	·1378	17. 34	·02697			
4. 11	31. 55	3. 59	·1380	18. 26:	·02718			
4. 31	31. 55	4. 24	·1387	19. 16	·02718			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.29		Aug.29		Aug.29				
h m	° ′ ″	h m		h m		h m		
4. 53	20. 31. 10	4. 59	·1377	19. 52	·02727			
5. 38	30. 25	5. 12	·1381	21. 10	·02713			
6. 57	31. 30	5. 20	·1378	23. 1	·02710			
7. 8	31. 30	5. 55	·1384	23. 59	·02708			
7. 13	31. 40	6. 11	·1383					
7. 25	30. 55	7. 0	·1386					
7. 44	31. 10	7. 14	·1384					
8. 7	30. 30	8. 11	·1386					
9. 8	30. 30	9. 16	·1387					
9. 42	30. 45	9. 51	·1386					
10. 27	30. 10	10. 24	·1387					
10. 42	31. 10	10. 39	·1394					
10. 59	30. 10	10. 52	·1387					
11. 24	30. 30	11. 21	·1391					
11. 42	30. 5	12. 2	·1387					
11. 58	28. 55	12. 12	·1394					
12. 11	29. 10	13. 4	·1386					
12. 43	25. 45	13. 12	·1391					
12. 58	26. 40	13. 29	·1386					
13. 10	26. 10	13. 39	·1389					
13. 26	26. 35	13. 55	·1383					
13. 54	26. 25	14. 3	·1385					
14. 8	29. 40	14. 11	·1379					
14. 13	29. 50	14. 15	·1387					
14. 23	32. 15	14. 25	·1386					
14. 38	32. 50	14. 37	·1396					
14. 43	31. 10	15. 12	·1390					
15. 52	25. 20	15. 21	·1393					
16. 8	26. 15	15. 52	·1392					
16. 23	25. 45	16. 0	·1395					
	***	16. 14	·1392					
17. 6	25. 25	16. 25	·1395					
17. 25	26. 5	16. 35	·1393					
17. 36	25. 30	17. 4	·1394					
17. 58	26. 15	17. 20	·1399					
18. 25	28. 50	17. 40	·1392					
18. 38	28. 40	18. 34	·1380					
18. 56	29. 20	19. 0	·1376					
19. 7	28. 30	19. 19	·1366					
19. 11	27. 15	19. 36	·1368					
19. 26	29. 20	19. 41	·1377					
19. 36	28. 45	19. 44	·1373					
19. 41	31. 0	19. 49	·1378					
19. 43	30. 25	19. 53	·1373					
19. 53	32. 5	19. 59	·1376					
19. 56	31. 25	20. 4	·1373					
19. 58	32. 10	20. 15	·1378					
20. 9	30. 15	20. 21	·1376					
20. 14	30. 55	20. 41	·1380					
20. 25	30. 25	22. 8	·1379					
20. 41	30. 5	22. 36	·1378					
21. 8	29. 25	22. 49	·1375					
21. 27	29. 35	23. 10	·1379					
22. 38	33. 5		***					
22. 53	34. 20	23. 59	·1374					
22. 56	33. 50							
23. 27	36. 15							
23. 43	36. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.29								
h m	° ′ ″	h m		h m		h m		
23. 56	20. 37. 25							
23. 59	37. 0							
Aug.30		Aug.30		Aug.30		Aug.30		
0. 0	20. 37. 0	0. 0	·1374	0. 0	·02708	0. 0	64·2	65·3
0. 12	37. 30		***	4. 4	·02775	1. 0	64·1	65·5
0. 23	38. 30	1. 42	·1381	7. 21	·02796	2. 0	64·2	65·8
1. 43	39. 35	1. 43	·1387	8. 57	·02811	3. 0	64·3	66·0
2. 5	37. 25	1. 52	·1381	14. 38	·02612	Max.	64·5	66·8
2. 26	36. 15	2. 9	·1376	15. 38	·02592	9. 0	60·6	64·2
2. 53	35. 30	2. 26	·1375	17. 30;	·02556	Min.	59·1	60·8
3. 11	35. 5	3. 18	·1388	19. 53	·02597	21. 0	61·3	63·2
3. 23	35. 30	3. 25	·1381	23. 59	·02604	22. 0	62·0	64·0
3. 27	34. 10	3. 40	·1387			23. 0	62·0	64·0
3. 41	34. 35	3. 46	·1384					
3. 51	33. 50	4. 11	·1388					
4. 12	33. 50	4. 15	·1392					
4. 23	33. 15	4. 21	·1385					
4. 26	33. 50	4. 28	·1388					
4. 37	33. 50	4. 34	·1390					
4. 41	33. 0	4. 42	·1382					
4. 56	33. 0	4. 52	·1386					
4. 58	32. 25	5. 0	·1382					
5. 8	32. 50	5. 8	·1389					
6. 12	31. 10	5. 13	·1387					
6. 24	31. 40	5. 53	·1388					
6. 55	31. 5	6. 15	·1383					
7. 9	31. 20	6. 27	·1385					
7. 27	30. 35	6. 39	·1382					
7. 41	30. 55	7. 52	·1387					
8. 11	30. 30	8. 15	·1386					
8. 24	31. 5	8. 20	·1388					
8. 28	30. 30	8. 54	·1385					
9. 23	31. 10		***					
9. 41	30. 45	11. 26	·1390					
10. 24	30. 20	11. 49	·1387					
10. 29	30. 35	13. 45	·1394					
10. 58	30. 5	14. 40	·1389					
11. 26	30. 45	14. 51	·1392					
11. 40	29. 50	17. 4	·1386					
12. 53	30. 10	17. 18	·1389					
12. 57	30. 40	17. 45	·1387					
13. 16	29. 20	18. 36	·1392					
13. 27	30. 15	18. 44	·1391					
13. 45	29. 45	19. 19	·1394					
14. 3	28. 30	20. 35	·1386					
14. 11	28. 30	21. 15	·1376					
14. 28	27. 25	21. 25	·1379					
14. 42	27. 40	21. 53	·1373					
14. 53	28. 30	23. 59	·1376					
15. 9	28. 40							
15. 15	28. 25							
15. 29	28. 35							
15. 41	27. 55							
15. 57	28. 25							
16. 24	27. 35							
16. 41	27. 20							
17. 2	28. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.30								
h m	° ′ ″	h m		h m		h m	°	°
17. 9	20. 28. 20							
17. 37	28. 50							
17. 51	28. 10							
18. 24	28. 15							
18. 37	27. 0							
18. 41	28. 15							
18. 59	27. 30							
19. 23	27. 40							
20. 4	26. 55							
20. 30	27. 50							
20. 39	27. 30							
21. 58	30. 50							
22. 11	30. 35							
22. 43	32. 0							
23. 37	35. 0							
23. 53	35. 15							
23. 59	35. 45							
Aug.31		Aug.31		Aug.31		Aug.31		
0. 0	20. 35. 45	0. 0	·1376	0. 0	·02604	Min.	62 ·9	64 ·5
0. 25	36. 30	0. 48	·1379	3. 46	·02682	0. 0	63 ·0	64 ·5
1. 26	37. 35	1. 49	·1385	9. 56	·02755	1. 0	63 ·7	65 ·0
1. 41	37. 20	1. 58	·1384	12. 23	·02755	2. 0	64 ·0	65 ·2
1. 54	37. 35	2. 21	·1387	13. 23	·02737	3. 0	63 ·4	65 ·1
4. 25	32. 50	2. 41	·1385	17. 21	·02748	9. 0	64 ·1	66 ·3
6. 9	31. 0	3. 23	·1387	19. 28	·02768	Max.	64 ·6	66 ·5
6. 23	31. 15	5. 15	·1392	22. 16	·02737	21. 0	64 ·2	66 ·0
6. 42	31. 0	8. 10	·1393	23. 59	·02735			
7. 23	31. 25	8. 22	·1396					
7. 26	31. 0	8. 51	·1392					
7. 44	30. 50	9. 24	·1394					
7. 57	31. 25	9. 59	·1390					
8. 8	30. 50	10. 26	·1395					
8. 15	31. 10	10. 52	·1390					
8. 23	30. 55	11. 13	·1389					
8. 37	31. 30	11. 27	·1394					
8. 44	30. 55	11. 44	·1390					
9. 28	30. 55	12. 4	·1391					
9. 53	30. 25	12. 24	·1388					
9. 58	30. 25	13. 7	·1392					
10. 18	28. 45	13. 17	·1395					
10. 43	29. 30	13. 32	·1390					
10. 57	29. 30	13. 41	·1392					
11. 14	28. 20	14. 11	·1388					
11. 28	29. 0	14. 42	·1392					
11. 44	28. 0	15. 28	·1388					
12. 31	32. 15	16. 25	·1390					
12. 43	33. 0	19. 4	·1386					
13. 8	30. 5		***					
13. 14	31. 30	22. 3	·1362					
13. 53	30. 5	23. 59	·1378					
14. 6	30. 5							
14. 41	29. 0							
15. 13	28. 35							
16. 12	29. 0							
16. 28	28. 50							
17. 38	28. 30							
18. 25	27. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.31								
h m	° ′ ″	h m		h m		h m	°	°
19. 6	20. 27. 0							
19. 56	27. 5							
20. 26	27. 10							
20. 43	26. 50							
22. 39	32. 10							
23. 29	34. 35							
23. 59	35. 50							
Sept. 1		Sept. 1		Sept. 1		Sept. 1		
0. 0	20. 35. 50	0. 0	·1378	0. 0	·02735	1. 0	64 ·6	66 ·1
0. 34	37. 30	0. 15	·1379	2. 5	·02766	3. 0	64 ·7	66 ·1
2. 11	34. 30	1. 10	·1387	7. 11	·02803	Max.	65 ·2	67 ·2
3. 25	33. 0	2. 55	·1384	9. 0	·02822	9. 0	64 ·6	66 ·0
3. 27	33. 20	3. 46	·1387	9. 59	·02809	Min.	63 ·3	65 ·8
3. 42	32. 35	4. 14	·1384	10. 21	·02804	21. 0	64 ·8	66 ·7
3. 53	33. 0	4. 25	·1386	10. 41	·02797			
3. 58	32. 40	4. 48	·1384	12. 25	·02792			
4. 23	33. 0	5. 56	·1390	13. 39	·02768			
4. 36	32. 30	6. 14	·1389	17. 2	·02771			
5. 0	32. 40	6. 30	·1392	18. 54	·02792			
5. 38	32. 25	6. 48	·1390	20. 33	·02792			
6. 46	32. 45	7. 24	·1394	23. 59	·02790			
6. 56	32. 5	7. 41	·1389					
7. 26	32. 30	8. 21	·1394					
7. 47	31. 25	9. 30	·1388					
8. 12	32. 5	10. 12	·1393					
8. 34	29. 0	10. 25	·1403					
8. 55	30. 50	10. 43	·1396					
9. 6	30. 50	11. 2	·1392					
9. 13	31. 35	11. 20	·1389					
9. 35	32. 5	11. 55	·1392					
9. 43	33. 0	12. 14	·1387					
9. 59	31. 55	12. 24	·1394					
10. 14	31. 30	13. 5	·1390					
10. 33	32. 40	13. 20	·1394					
10. 46	31. 30	13. 50	·1385					
11. 14	30. 35	13. 56	·1386					
11. 43	31. 5	14. 15	·1384					
11. 56	30. 30	15. 0	·1383					
12. 8	30. 50	15. 12	·1378					
12. 17	30. 30	15. 26	·1381					
12. 38	31. 10	15. 45	·1387					
12. 40	30. 50	16. 48	·1389					
13. 8	31. 45	17. 2	·1386					
13. 53	27. 45	22. 15	·1370					
14. 14	28. 30	22. 24	·1371					
14. 43	27. 15	23. 21	·1369					
15. 10	30. 35	23. 26	·1375					
15. 23	31. 30	23. 59	·1376					
15. 58	30. 25							
16. 23	30. 30							
17. 4	29. 35							
17. 41	29. 35							
18. 25	28. 40							
18. 38	28. 10							
18. 56	28. 35							
19. 51	27. 50							
21. 7	30. 20							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 1								
h m	° ′ ″	h m		h m		h m	°	°
22. 13	20. 33. 10							
22. 25	33. 45							
23. 14	35. 45							
23. 28	37. 0							
23. 38	37. 0							
23. 59	38. 5							
Sept. 2		Sept. 2		Sept. 2		Sept. 2		
0. 0	20. 38. 5	0. 0	·1376	0. 0	·02790	1. 0	65 ·7	67 ·2
0. 14	38. 5	0. 45	·1381	2. 14	·02820	3. 0	65 ·7	67 ·7
0. 33	39. 10	1. 26	·1380	5. 40	·02864	Max.	67 ·1	69 ·2
1. 41	38. 30	1. 52	·1375	8. 34	·02901	9. 0	66 ·6	68 ·3
1. 53	37. 10	2. 19	·1381	9. 53	·02885	Min.	63 ·2	64 ·4
2. 7	37. 10	2. 26	·1387	11. 49	·02867	21. 30	65 ·3	67 ·0
2. 16	36. 20	2. 52	·1380	14. 13	·02808			
2. 25	36. 50	3. 19	·1380	14. 40	·02812			
2. 55	35. 0	3. 44	·1382	15. 10	·02799			
3. 56	34. 5	4. 6	·1380	16. 5	·02802			
4. 55	32. 20	5. 15	·1387	17. 3	·02793			
5. 18	32. 0	5. 38	·1383	19. 53:	·02826			
5. 39	30. 30	5. 49	·1385	23. 59	·02818			
5. 54	29. 45	6. 6	·1391					
6. 7	30. 25	6. 13	·1388					
6. 42	30. 5	6. 43:	·1393					
7. 17	31. 50	7. 18	·1387					
7. 55	30. 25	7. 27	·1389					
8. 10	31. 20	7. 44	·1386					
8. 40	31. 0	8. 5	·1387					
9. 9	28. 45	8. 19	·1381					
9. 15	28. 45	8. 40	·1386					
9. 28	20. 55	9. 22	·1380					
9. 53	25. 30	9. 41	·1411					
10. 7	23. 35	9. 56	·1392					
10. 23	25. 5	10. 25	·1381					
10. 28	25. 5	10. 40	·1382					
11. 9	28. 0	10. 57	·1379					
11. 23	28. 0	11. 44	·1383					
11. 44	30. 5	11. 55	·1389					
11. 56	29. 25	12. 15	·1390					
12. 9	30. 45	12. 44	·1387					
12. 28	29. 25	13. 10	·1389					
12. 44	29. 5	13. 19	·1386					
12. 58	30. 15	13. 42	·1391					
13. 12	30. 15	14. 11	·1390					
13. 53	33. 30	14. 29	·1383					
14. 9	30. 0	15. 2	·1388					
14. 25	28. 0	15. 36	·1385					
14. 40	29. 45	15. 42	·1386					
14. 52	31. 15	15. 51	·1384					
15 23	26. 30	16. 14	·1387					
15. 52	28. 15	18. 40	·1382					
15. 56	27. 20	18. 44	·1385					
16. 9	29. 0	18. 59	·1381					
16. 53	30. 45	20. 22	·1371					
17. 3	30. 10	21. 22	·1368					
17. 55	29. 0	22. 19	·1372					
18. 10	28. 15	22. 29	·1371					
18. 36	27. 55	22. 54	·1375					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 2		Sept. 2						
h m	° ′ ″	h m		h m		h m	°	°
18. 41	20. 26. 20	23. 59	·1383					
18. 48	28. 5							
18. 59	27. 0							
19. 26	27. 0							
19. 43	26. 50							
20. 33	27. 20							
22. 28	32. 25							
23. 43	36. 55							
23. 59	37. 5							
Sept. 3		Sept. 3		Sept. 3		Sept. 3		
0. 0	20. 37. 5	0. 0	·1383	0. 0	·02818	1. 0	66 ·3	68 ·0
0. 20	37 20	0. 4	·1382	3. 52	·02877	Max.	67 ·6	69 ·3
1. 31	37. 0	0. 41	·1386	8. 48	·02916	9. 0	66 ·6	68 ·8
1. 56	36. 10	1. 9	·1385	9. 54	·02909	Min.	62 ·4	64 ·3
2. 8	36. 45	1. 53	·1388	16. 41	·02788	21. 0	65 ·0	66 ·9
2. 23	35. 30	2. 6	·1394	17. 29	·02791			
2. 40	34. 50	2. 22	·1386	19. 40	·02811			
2. 47	35. 0	2. 39	·1385	23. 59	·02809			
3. 3	34. 30	2. 44	·1388					
3. 59	33. 35	2. 57	·1386					
4. 13	33. 50	3. 39	·1388					
4. 38	32. 55	3. 57	·1384					
5. 54	32. 25	4. 13	·1387					
7. 9	32. 35	4. 38	·1383					
7. 56	32. 10	5 14	·1387					
8. 56	31. 15	5. 50	·1385					
9. 9	30. 10	6. 9	·1389					
9. 40	31. 0	8. 43	·1388					
9. 53	29. 35	9. 5	·1386					
10. 3	29. 30	9. 14	·1388					
11. 10	30. 25	9. 25	·1386					
12. 53	31. 10	9. 40	·1388					
13. 0	30. 35	10. 3	·1384					
14. 4	30. 10	10. 42	·1385					
14. 43	30. 35	10. 52	·1388					
15. 3	29. 5	11. 35	·1385					
15. 20	29. 15	12. 52	·1390					
15. 41	29. 40	12. 57	·1388					
16. 0	29. 40	15. 11	·1387					
16. 11	29. 25	16. 52	·1390					
16. 36	29. 20	17. 3	·1387					
16. 43	28. 35	17. 29	·1389					
16. 55	29. 10	17. 57	·1384					
17. 26	28. 5	18. 49	·1379					
18. 41	28. 30	19. 18	·1380					
18. 52	27. 50	21. 19	·1370					
18. 59	27. 40	22. 56	·1379					
19. 23	28. 5	23. 38	·1385					
19. 44	27. 50	23. 52	·1384					
19. 59	28. 45	23. 59	·1387					
20. 26	28. 55							
20. 50	29. 45							
20. 58	30. 0							
22. 43	34. 50							
23. 20	37. 30							
23. 52	38. 20							
23. 59	39. 10							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 4		Sept. 4		Sept. 4		Sept. 4		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 39. 10	0. 0	·1387	0. 0	·02809	1. 0	66·6	68·2
0. 13	39. 35	0. 54	·1386	5. 16	·02886	3. 0	66·9	68·8
0. 55	39. 35	1. 18	·1387	5. 40	·02893	Max.	68·0	70·2
1. 11	40. 25	1. 41	·1384	5. 58	·02896	9. 0	67·6	69·0
1. 31	39. 15	2. 19	·1390	7. 31	·02901	Min.	63·9	66·1
1. 40	39. 30	2. 39	·1388	9. 14	·02937	21. 0	65·6	67·9
1. 50	38. 30	3. 6	·1391	12. 24	·02898			
2. 23	37. 30	3. 38	·1387	13. 13	·02898			
2. 47	35. 35	3. 54	·1392	14. 53	·02854			
3. 38	33. 30	4. 24	·1388	16. 35	·02833			
3. 43	33. 45	4. 41	·1393	17. 23	·02819			
4. 8	33. 35	4. 55	·1386	18. 44	·02832			
4. 23	33. 5	5. 10	·1383	20. 8	·02829			
4. 39	33. 40	5. 19	·1387	23. 59	·02823			
4. 43	33. 0	5. 39	·1390					
5. 6	32. 45	5. 42	·1399					
5. 42	33. 50	5. 55	·1394					
5. 54	33. 30	6. 0	·1395					
6. 29	33. 40	6. 6	·1392					
6. 41	33. 25	6. 41	·1396					
7. 9	33. 35	6. 51	·1394					
7. 28	32. 35	7. 3	·1396					
7. 40	33. 15	7. 22	·1394					
7. 53	32. 40	7. 37:	·1386					
8. 8	33. 10	7. 47	·1389					
8. 10	32. 30	8. 9	·1382					
8. 26	33. 5	8. 22	·1379					
8. 43	33. 0	8. 37	·1382					
8. 57	32. 15	8. 45	·1379					
10. 23	30. 45	9. 25	·1385					
10. 58	30. 55	9. 44	·1390					
11. 30	28. 50	10. 2	·1386					
11. 56	27. 5	10. 24	·1383					
12. 7	25. 30	11. 6	·1390					
12. 25	24. 25	11. 19	·1385					
12. 33	24. 35	11. 30	·1387					
12. 55	28. 0	11. 52	·1388					
12. 57	28. 0	12. 0	·1392					
13. 6	28. 30	12. 33	·1385					
13. 36	29. 50	12. 52	·1378					
14. 38	27. 0	14. 1	·1394					
14. 54	27. 35	15. 11	·1384					
14. 57	27. 0	16. 16	·1381					
15. 16	27. 50	16. 42	·1384					
15. 42	27. 20	17. 45	·1386					
16. 8	27. 35	18. 43	·1383					
16. 26	30. 0	19. 40	·1376					
16. 41	30. 45	21. 12	·1364					
17. 9	29. 35	21. 23	·1354					
17. 43	29. 20	21. 49	·1361					
18. 24	26. 30	22. 20	·1359					
19. 54	27. 45	23. 41	·1373					
21. 9	29. 35	23. 54	·1370					
21. 23	28. 30	23. 59	·1372					
21. 39	31. 0							
22. 40	35. 45							
23. 40	39. 10							
23. 44	39. 50							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 4								
h m	° ′ ″	h m		h m		h m	°	°
23. 54	20. 39. 20							
23. 59	40. 25							
Sept. 5		Sept. 5		Sept. 5		Sept. 5		
0. 0	20. 40. 25	0. 0	·1372	0. 0	·02823	1. 0	66·6	68·1
0. 26	40. 40	0. 34	·1378	2. 19	·02873	3. 0	67·1	68·2
2. 9	38. 30	0. 54	·1382	8. 48	·02917	Max.	67·5	69·0
2. 33	38. 20	2. 16	·1388	10. 27	·02902	9. 0	66·6	69·0
3. 46	35. 0	2. 38	·1390	15. 42	·02821	Min.	62·6	65·2
4. 9	34. 30	3. 7	·1386	17. 53:	·02775	21. 0	65·1	67·2
4. 41	33. 35	4. 39	·1388	19. 52	·02802	22. 0	65·7	67·3
5. 26	32. 50	4. 55	·1387	19. 56	·02765	23. 0	65·7	67·5
6. 53	33. 20	5. 33	·1384	23. 59	·02768			
7. 10	33. 0	6. 48	·1388					
7. 25	33. 20	7. 8	·1387					
7. 29	32. 45	7. 40	·1389					
7. 51	33. 0	8. 14	·1386					
10. 23	31. 35	8. 25	·1388					
10. 50	30. 50	8. 49	·1386					
11. 33	31. 20	10. 24	·1387					
12. 53	32. 50	10. 37	·1391					
13. 14	31. 0	11. 5	·1387					
13. 50	31. 35	12. 49	·1392					
14. 8	31. 15	13. 46	·1388					
14. 23	31. 40	14. 11	·1390					
14. 44	31. 50	17. 25	·1388					
15. 28	31. 5	18. 45	·1384					
15. 55	31. 5	21. 37:	·1366					
16. 0	30. 30	22. 29	·1369					
16. 11	31. 0	23. 10	·1379					
16. 57	30. 20	23. 25	·1378					
17. 26	30. 10	23. 44	·1384					
18. 29	29. 35	23. 59	·1378					
18. 53	29. 15							
18. 57	29. 35							
19. 8	29. 5							
19. 51	28. 10							
20. 16	28. 25							
22. 37	34. 0							
22. 41	33. 10							
23. 13	34. 35							
23. 24	34. 0							
23. 30	35. 0							
23. 38	37. 30							
23. 43	38. 5							
23. 57	37. 20							
23. 59	39. 0							
Sept. 6		Sept. 6		Sept. 6		Sept. 6		
0. 0	20. 39. 0	0. 0	·1378	0. 0	·02768	0. 0	65·9	67·8
0. 58	40. 0	0. 14	·1390	1. 6	·02777 ·02668	1. 0	66·6	68·2
1. 6	41. 40	0. 48	·1395	3. 14	·02705	2. 0	66·7	68·2
1. 26	41. 40	0. 59	·1390	3. 23	·02732 ·02829	3. 0	68·8	68·6
1. 34	42. 30	1. 22	·1390	4. 33	·02820	Max.	68·8	70·0
1. 41	42. 0	1. 30	·1398		***	9. 0	67·5	69·7
1. 58	42. 0	1. 42	·1396	5. 19	·02844 ·02900	Min.	64·0	66·9
2. 9	43. 5	1. 56	·1397			21. 0	66·0	67·5
2. 11	41. 50	2. 7	·1406			22. 0	65·8	67·7

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 6		Sept. 6		Sept. 6		Sept. 6		
h m	° ′ ″	h m		h m		h m	°	°
2.13	20.42.10	2.14	·1399	6. 8	·02923	23. 0	66·2	68·0
2.26	38.20	2.27	·1398	6.25	·02913			
2.28	40.20	2.35	·1390	7.24	·02951			
2.38	39.50	2.38	·1411	7.57	·02925			
2.41	42.35	2.41	·1407	10.22	·02896			
2.43	41.20	2.45	·1419	10.54	·02867			
2.54	42.10	3. 6	·1381	11.42	·02863			
3. 7	38.20	3. 9	·1407	12. 0	·02840			
3.10	40.50	3.16	·1419	12.13	·02843			
3.15	40. 0	3.32	·1410	12.55:	·02820			
3.27	40. 0	3.45	·1382	14.19:	·02844			
3.40	40.45	3.49	·1384	16. 8	·02838			
3.44	42.50	3.59	·1368	18. 3:	·02813			
3.56	43.55	4. 7	·1369	19.39	·02849			
3.58	42.45	4.11	·1382	23.33	·02831			
4.10	42.45	4.27	·1371	23.59	·02840			
4.13	44. 0	4.34	·1375					
4.24	43. 0	4.38	·1364					
4.28	39. 0	4.42	·1365					
4.38	38.50	4.48	·1354					
4.42	37.30	4.53	·1358					
4.43	38.30	5. 4	·1367					
4.55	37.35	5. 6	·1366					
5. 9	37. 5	5.12	·1384					
5.11	37.50		***					
5.22	37. 5	5.24	·1387					
5.41	37.30	5.36	·1399					
5.56	39. 5	5.47	·1391					
6. 8	38.50	5.54	·1393					
6.26	34.25	6.11	·1375					
6.38	34.10	6.18	·1372					
6.43	32.35	6.38	·1380					
7. 9	24.10	6.59	·1384					
7.28	30. 5	7.22	·1401					
7.56	27. 0	7.50	·1379					
8.13	28.50	8.22	·1377					
8.30	25.35	8.52	·1384					
8.50	25.35	9. 3	·1379					
9.13	27.15	9.12	·1380					
9.37	27. 5	9.24	·1372					
9.53	28.35	9.42	·1377					
9.58	26.20	9.55	·1375					
10. 8	27.20	10. 3	·1381					
10.11	27. 5	10.14	·1388					
10.26	28.30	10.27	·1384					
10.39	28.35	10.43	·1389					
10.43	26.30	11. 3	·1379					
11. 4	25.40	11.44	·1386					
11.10	26.25	12. 2	·1379					
11.17	25.25	12.13	·1382					
11.41	31.50	12.50	·1392					
11.53	29.30	13.14	·1383					
12. 8	33.10	13.38	·1377					
12.13	33.20	13.58	·1381					
13.11	28.35	14.11	·1379					
13.58	29.50	14.24	·1384					
14.25	29.30	14.40	·1385					
14.40	28.50	15. 0	·1381					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 6		Sept. 6						
h m	° ′ ″	h m		h m		h m	°	°
14.58	20.29.10	16. 4	·1382					
15. 7	28.35	16.22	·1384					
15.15	29.30	16.55	·1382					
15.41	28. 0	17.40	·1388					
16. 4	28.35	18. 0	·1383					
16.25	30.35	18.24	·1384					
16.55	32.30	19. 4	·1366					
17. 6	31.45	19.50	·1370					
17.28	30.35	20.43	·1364					
17.39	29.35	20.54	·1370					
17.56	29.35	21.11	·1371					
18. 5	29. 5	21.26	·1363					
18.13	29.35	21.40	·1360					
18.27	29. 5	21.50	·1372					
18.37	29. 5	22. 8	·1363					
18.39	27. 0	23. 4	·1358					
18.42	28.30	23.25	·1340					
18.55	28.50	23.41	·1332					
19. 8	25.40	23.59	·1336					
19.15	27.20							
19.32	25.30							
20.37	25.30							
20.54	24.30							
21. 4	26.35							
21.11	25.15							
21.26	28.45							
21.39	28.20							
21.53	30.30							
21.55	33.45							
21.57	32.50							
22. 0	32. 0							
22.14	33.10							
22.25	34.50							
22.27	27.30							
22.32	28.10							
23. 7	32.30							
23.16	32.50							
23.43	36.35							
23.59	38.40							
Sept. 7		Sept. 7		Sept. 7		Sept. 7		
0. 0	20.38.40	0. 0	·1336	0. 0	·02840	0. 0	66·7	68·4
0.38	38.50	0.27	·1355	2.45	·02891	1. 0	66·9	69·0
0.59	38. 5	1.12	·1366	4.22	·02918	3. 0	67·4	69·7
1. 8	42. 0	1.32	·1364	10. 8	·02940	Max.	68·5	70·9
1.42	40.15	1.46	·1370	10.38	·02920	9. 0	68·5	70·8
1.53	39.35	1.56	·1369	14.42	·02913	Min.	65·5	68·5
2.17	39.35	2. 8	·1375	16.21	·02893	21. 0	66·8	69·5
2.26	38.30	2.23	·1384		***			
2.45	38.10	2.32	·1385	21. 6	·02891			
2.56	37.30	2.39	·1378	21.52	·02845			
3. 9	38. 0	2.48	·1379	22. 7	·02864			
3.12	36.25	2.57	·1376	23.59	·02873			
3.27	34.30	3.11	·1377					
3.35	34.30	3.19	·1375					
4.13	31.35	3.38	·1377					
5.12	31.35	4. 3	·1370					
5.16	32.20	4.21	·1371					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 7		Sept. 7						
h m	° ′ ″	h m		h m		h m	°	°
6. 44	20. 31. 25	5. 18	·1386					
7. 30	31. 35	5. 44	·1383					
8. 11	31. 0	8. 0	·1386					
8. 28	30. 10	8. 9	·1388					
8. 38	30. 10	9. 46	·1380					
9. 14	28. 55	10. 20	·1403					
9. 34	29. 5	11. 2	·1381					
9. 43	31. 40	11. 19	·1384					
9. 55	29. 0	12. 44	·1377					
10. 11	24. 50	13. 8	·1384					
10. 26	25. 25	13. 21	·1383					
10. 38	23. 40	13. 26	·1384					
10. 44	24. 5	13. 40	·1379					
10. 56	24. 0	13. 56	·1386					
11. 26	27. 0	14. 10	·1383					
11. 58	29. 20	14. 41	·1385					
12. 6	28. 50	15. 10	·1392					
12. 13	29. 25	15. 40	·1383					
12. 24	29. 5	16. 12	·1389					
12. 58	30. 50	17. 12	·1387					
13. 3	29. 30	17. 18	·1391					
13. 20	28. 30		* * *					
13. 38	29. 15	18. 59	·1382					
13. 42	29. 20	19. 9	·1376					
13. 50	30. 0	19. 31	·1384					
14. 3	29. 30	20. 26	·1366					
14. 38	29. 5	20. 33	·1369					
14. 55	29. 50	20. 54	·1351					
15. 25	28. 20	21. 0	·1356					
15. 52	30. 0	21. 14	·1349					
15. 56	29. 45	21. 26	·1351					
16. 8	31. 30	21. 40	·1359					
16. 24	29. 50	22. 10	·1349					
16. 40	29. 20	22. 18	·1356					
17. 10	30. 10	22. 34	·1351					
17. 13	31. 10	22. 40	·1353					
17. 24	30. 5	22. 50	·1350					
17. 28	30. 50	23. 0	·1355					
17. 38	29. 5	23. 18	·1354					
17. 42	29. 30	23. 29	·1362					
18. 1	29. 25	23. 44	·1356					
18. 9	28. 0	23. 59	·1357					
18. 12	28. 50							
18. 23	28. 20							
18. 27	29. 10							
18. 41	25. 10							
18. 57	28. 20							
19. 4	23. 5							
19. 11	24. 20							
19. 17	27. 30							
19. 27	28. 0							
19. 32	29. 50							
19. 50	29. 30							
20. 9	28. 0							
20. 28	33. 0							
20. 40	31. 20							
20. 46	34. 15							
20. 53	34. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 7								
h m	° ′ ″	h m		h m		h m	°	°
20. 55	20. 36. 35							
21. 39	41. 40							
22. 8	36. 50							
22. 23	42. 30							
22. 27	42. 5							
22. 33	43. 0							
22. 37	43. 10							
22. 41	44. 20							
22. 53	41. 55							
22. 59	44. 35							
	* * *							
23. 39	39. 30							
23. 47	42. 10							
23. 54	40. 30							
23. 59	41. 15							
Sept. 8		Sept. 8		Sept. 8		Sept. 8		
0. 0	20. 41. 15	0. 0	·1357	0. 0	·02873	0. 0	67·8	71·1
0. 15	43. 10	0. 14	·1359	1. 14	·02882	3. 0	67·7	71·0
0. 38	42. 35	0. 52	·1364	2. 32	·02949	Max.	69·1	71·7
0. 47	43. 30	1. 14	·1354	2. 40	·02938	9. 0	68·5	71·1
0. 51	43. 30	1. 24	·1374	3. 3	·02965	Min.	67·0	69·0
1. 0	45. 30	1. 43	·1361	4. 9	·02982	21. 0	67·8	69·6
1. 53	39. 0	2. 5	·1358	4. 13	·02991			
2. 26	40. 30	2. 13	·1368	4. 46	·02999			
2. 49	39. 0	2. 29	·1376	4. 55	·03003			
2. 58	41. 10	2. 40	·1366	5. 22	·03037			
3. 13	38. 45		*	6. 6	·02998			
3. 23	39. 35	2. 53	·1379	7. 5	·02991			
3. 27	38. 20	3. 11	·1367	7. 30	·02998			
3. 39	38. 40	3. 19	·1371	8. 7	·02978			
3. 55	37. 45	3. 29	·1369	8. 26	·02978			
4. 28	37. 50	4. 2	·1384	10. 23	·02902			
4. 44	34. 0	4. 15	·1395	10. 34	·02881			
4. 58	23. 35	4. 41	·1342	10. 46	·02888			
5. 9	23. 45	4. 52	·1338	11. 9	·02863			
5. 14	26. 5	5. 11	·1374	11. 23	·02876			
5. 56	33. 40	5. 30	·1385	11. 32	·02862			
6. 10	33. 10	5. 49	·1384	11. 53	·02857			
6. 25	32. 30	6. 4	·1375	12. 4	·02867			
6. 30	33. 10	6. 20	·1380	12. 37	·02831			
6. 54	31. 0	6. 41	·1377	12. 55	·02845			
7. 13	19. 55	6. 45	·1381	13. 34	·02851			
7. 30	23. 30	7. 1	·1366	13. 49	·02866			
7. 40	21. 35	7. 10	·1369	14. 16	·02859			
7. 55	27. 50	7. 24	·1390	14. 28	·02854			
8. 3	25. 0	7. 40	·1388	14. 51	·02867			
8. 11	24. 50	7. 52	·1398	15. 23	·02882			
8. 23	27. 50	8. 5	·1380	16. 16	·02882			
8. 28	26. 50	8. 24	·1392	16. 39	·02898			
8. 38	27. 15	8. 56	·1403	17. 16	·02897			
8. 40	26. 30	9. 19	·1389	18. 34	·02918			
8. 57	29. 0	9. 28	·1375	19. 41	·02902			
9. 8	26. 30	9. 41	·1383	20. 1	·02917			
9. 14	26. 45	9. 50	·1377	20. 40	·02903			
9. 27	21. 0	9. 57	·1377	22. 1	·02885			
9. 53	28. 30	10. 2	·1367	22. 47	·02904			
9. 58	28. 35	10. 14	·1379	23. 59	·02904			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 8		Sept. 8						
h m	° ′ ″	h m		h		h m	°	°
10. 9	20. 25. 40	10. 24	·1380					
10. 21	27. 10	10. 40	·1359					
10. 26	26. 25	10. 52	·1365					
10. 39	21. 0	11. 8	·1363					
10. 58	23. 50	11. 15	·1355					
11. 7	25. 50	11. 26	·1362					
11. 29	33. 0	11. 41	·1360					
11. 39	33. 0	11. 52	·1372					
11. 57	27. 20	12. 11	·1400					
12. 24	37. 10	12. 23	·1392					
13. 2	22. 30	12. 40	·1371					
13. 9	20. 50	12. 59	·1376					
13. 24	20. 20	13. 25	·1397					
13. 46	25. 35	13. 45	·1395					
13. 53	25. 45	14. 1	·1383					
14. 9	29. 10	14. 11	·1382					
14. 23	27. 35	14. 26	·1363					
14. 41	31. 30	14. 40	·1357					
14. 58	30. 25	14. 51	·1356					
15. 9	32. 10	15. 22	·1367					
15. 38	32. 45	15. 41	·1381					
15. 43	31. 0	15. 50	·1383					
16. 11	29. 25	16. 13	·1375					
16. 26	32. 0	16. 22	·1370					
16. 39	30. 5	16. 41	·1372					
16. 54	30. 50	16. 52	·1383					
17. 28	29. 50	17. 3	·1385					
17. 45	31. 50	17. 14	·1378					
17. 56	31. 20	17. 28	·1373					
18. 28	34. 30	17. 40	·1376					
18. 41	36. 25	17. 59	·1371					
18. 54	36. 15	18. 11	·1374					
19. 11	37. 10	18. 19	·1371					
19. 23	36. 10	18. 25	·1372					
19. 32	33. 0	18. 40	·1368					
19. 38	28. 35	18. 44	·1371					
19. 42	29. 50	19. 5	·1366					
19. 56	35. 10	19. 41	·1339					
	***	19. 45	·1349					
20. 27	33. 0	19. 56	·1358					
20. 41	33. 40	20. 10	·1354					
20. 53	32. 50	20. 14	·1355					
21. 22	36. 10	20. 26	·1348					
21. 40	36. 45	20. 40	·1355					
21. 49	35. 50	20. 44	·1353					
22. 3	35. 30	21. 20	·1362					
22. 9	37. 10	21. 40	·1364					
22. 13	36. 5	21. 58	·1362					
22. 28	35. 50	22. 26	·1352					
22. 43	34. 20	23. 22	·1375					
23. 13	36. 30	23. 59	·1364					
23. 27	38. 20							
23. 42	38. 20							
23. 55	39. 50							
23. 59	38. 5							
Sept. 9		Sept. 9		Sept. 9		Sept. 9		
0. 0	20. 38. 5	0. 0	·1364	0. 0	·02904	1. 0	68·5	70·3
0. 28	40. 40	0. 25	·1379	1. 9	·02932	3. 0	68·9	70·7

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 9		Sept. 9		Sept. 9		Sept. 9		
h m	° ′ ″	h m		h m		h m	°	°
0. 39	20. 40. 15	1. 10	·1373	1. 49	·02974	Max.	68·9	70·8
0. 53	41. 25	1. 40	·1380	2. 9	·02981	0. 0	65·8	67·1
1. 0	39. 30	1. 54	·1385	2. 33	·03002	Min.	64·1	66·4
1. 8	39. 45	1. 59	·1379	2. 53	·02989	22. 0	67·3	69·0
1. 24	36. 50	2. 10	·1379	4. 9	·03021			
1. 40	38. 15	2. 18	·1387	4. 35	·03011			
1. 55	41. 15	2. 25	·1380	4. 46	·03032			
2. 9	40. 55	2. 40	·1395	5. 23	·03028			
2. 13	42. 50	2. 52	·1377	5. 34	·03018			
2. 24	37. 20	3. 9	·1382	6. 27	·03021			
2. 27	37. 20	3. 12	·1370		*-*			
2. 32	38. 40	3. 16	·1375	7. 8	·03007			
2. 42	38. 15	3. 21	·1371	7. 34	·02996			
2. 58	40. 5	3. 32	·1382	7. 39	·02999			
3. 6	41. 55	3. 39	·1369	8. 9	·02977			
3. 9	37. 30	3. 40	·1370	9. 7	·02963			
3. 15	35. 45	3. 51	·1352	11. 6	·02881			
3. 24	38. 30	4. 4	·1365	11. 23	·02822			
3. 38	39. 50	4. 25	·1367	11. 33	·02830			
3. 56	34. 30	4. 39	·1361	11. 59	·02793			
4. 23	35. 5	4. 55	·1383	12. 27	·02797			
4. 36	31. 55	5. 11	·1388	12. 34	·02786			
4. 42	32. 5	5. 24	·1378	13. 11	·02812			
4. 54	31. 10	5. 37	·1367	13. 28	·02806			
5. 23	34. 10	5. 43	·1375	13. 54	·02815			
5. 27	34. 0	5. 51	·1371	14. 8	·02811			
5. 40	30. 0	6. 4	·1375	15. 3	·02823			
5. 43	29. 30	6. 18	·1373	15. 8	·02822			
5. 53	26. 50	6. 27	·1385	16. 37	·02867			
6. 3	27. 30	6. 48	·1373	17. 38	·02871			
6. 14	29. 35	6. 58	·1358	17. 58	·02867			
6. 26	30. 40	7. 4	·1357	18. 56	·02891			
6. 38	31. 25	7. 18	·1383	22. 41	·02880			
6. 41	30. 35	7. 29	·1373	23. 59	·02903			
6. 50	32. 20	7. 41	·1395					
6. 58	17. 5	8. 4	·1375					
7. 13	23. 0	8. 20	·1365					
7. 26	16. 30	8. 30	·1369					
7. 37	20. 40	8. 54	·1357					
7. 43	21. 50	9. 11	·1363					
7. 56	24. 0	9. 50	·1377					
8. 0	24. 0	10. 24	·1375					
8. 8	25. 5	10. 49	·1383					
8. 23	21. 30	11. 6	·1400					
8. 54	25. 0	11. 17	·1383					
9. 11	25. 0	11. 31	·1413					
9. 15	27. 55	11. 45	·1409					
9. 26	28. 5	12. 4	·1391					
9. 40	26. 50	12. 36	·1376					
9. 44	26. 50	12. 43	·1381					
10. 7:	29. 0	12. 49	·1378					
10. 21	28. 0	13. 13	·1382					
10. 42	33. 20	13. 42	·1369					
10. 54	33. 20	14. 0	·1376					
10. 59	36. 0	14. 39	·1377					
11. 8	42. 45	15. 34	·1386					
11. 15	32. 45	15. 51	·1384					
11. 44	37. 0	15. 58	·1385					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *-* denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.	Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 9		Sept. 9							Sept. 10		Sept. 10		Sept. 10		Sept. 10		
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
11. 58	20. 33. 25	16. 15	·1378						0. 0	20. 37. 30	0. 0	·1359	0. 0	·02903	Min.	67 ·7	69 ·5
12. 12	32. 30	16. 43	·1387						0. 15	37. 10	0. 21	·1369	2. 33	·02937	1. 0	67 ·9	69 ·7
12. 23	30. 30	17. 8	·1378						0. 36	38. 30	0. 27	·1375	3. 4	·02936	Max.	69 ·1	71 ·4
12. 29	24. 50	17. 24	·1384						0. 53	38. 50	0. 43	·1374	5. 9	·02986	9. 0	68 ·9	71 ·0
12. 43	25. 20	17. 36	·1367						1. 24	39. 0	0. 51	·1377	5. 23	·02973	Min.	67 ·9	69 ·9
12. 54	26. 30	17. 50	·1359						2. 5	37. 45	1. 26	·1373	5. 45	·03008	21. 0	68 ·0	70 ·0
13. 25	25. 30	18. 6	·1366						2. 9	38. 50	2. 18	·1384	6. 16	·02996			
13. 53	33. 30	18. 16	·1363						2. 22	38. 50	2. 50	·1372	11. 3	·02961			
14. 0	33. 30	18. 27	·1369						2. 26	37. 50	3. 4	·1376	11. 10	·02972			
14. 16	36. 45	19. 24	·1373						2. 39	37. 40	3. 15	·1374	12. 1	·02926			
14. 39	37. 15	19. 45	·1370						2. 49	36. 35	3. 27	·1381	12. 9	·02917			
14. 42	35. 50	20. 4	·1372						3. 6	36. 15	3. 49	·1377	12. 34	·02932			
14. 53	35. 50	20. 51	·1362						3. 18	35. 20	4. 13	·1388	12. 46	·02924			
14. 58	31. 20	21. 15	·1360						3. 25	35. 50	4. 27	·1379	13. 8	·02932			
15. 14	31. 5	21. 42	·1366						3. 40	34. 45	4. 38	·1373	13. 41	·02904			
15. 39	28. 35	22. 12	·1364						4. 9	34. 0	4. 49	·1375	14. 42	·02935			
15. 44	29. 5	22. 25	·1367						4. 24	34. 5	5. 20	·1355	15. 7	·02943			
16. 1	29. 15	22. 45	·1352						4. 27	33. 10	5. 43	·1395	16. 8	·02947			
16. 10	28. 30	22. 50	·1353						4. 37	33. 20	6. 11	·1394	16. 53	·02935			
16. 24	28. 30	23. 0	·1349						4. 44	32. 40	6. 22	·1384	17. 19	·02954			
16. 38	30. 5	23. 41	·1356						4. 58	30. 50	6. 41	·1373	19. 38	·02962			
17. 12	31. 0	23. 51	·1359						5. 11	31. 10	6. 46	·1377	21. 11	·02941 ·02809			
17. 27	34. 40	23. 59	·1359						5. 16	30. 25	7. 24	·1376	23. 59	·02794			
17. 38	33. 40								5. 34	17. 50	7. 44	·1383					
17. 41	34. 5								5. 39	17. 55	8. 24	·1382					
17. 44	32. 50								5. 51	20. 30	8. 43	·1384					
17. 55	31. 20								6. 8	23. 0	8. 55	·1399					
18. 7	31. 20								6. 14	22. 45	9. 14	·1392					
18. 10	32. 10								6. 24	21. 20	9. 30	·1388					
18. 23	31. 0								6. 39	23. 10	9. 41	·1394					
18. 30	31. 0								7. 23	29. 20	9. 53	·1388					
18. 40	33. 5								7. 29	30. 10	10. 11	·1384					
18. 43	31. 40								7. 58	31. 0	10. 44	·1380					
18. 54	33. 5								8. 17	30. 35	11. 0	·1385					
19. 25	29. 45								8. 40	31. 50	11. 12	·1403					
19. 28	29. 35								8. 45	31. 20	11. 19	·1398					
19. 34	28. 30								8. 56	29. 5	11. 41	·1394					
19. 42	29. 45								9. 9	31. 40	11. 49	·1387					
	***								9. 29	32. 30	12. 22	·1382					
20. 28	29. 35								9. 40	30. 25	12. 25	·1383					
20. 38	30. 25								9. 53	31. 50	12. 38	·1378					
21. 12	29. 20								10. 10	29. 30	12. 56	·1391					
21. 36	29. 50								10. 39	30. 40	13. 5	·1392					
21. 57	31. 20								10. 55	30. 55	13. 14	·1386					
22. 14	31. 40								11. 3	31. 40	13. 28	·1385					
22. 24	33. 50								11. 22	37. 20	13. 51	·1382					
22. 38	34. 20									(†)	14. 10	·1376					
22. 42	34. 0								12. 23	30. 35	14. 41	·1378					
22. 56	35. 0								12. 34	29. 55	14. 53	·1375					
23. 8	34. 10								12. 40	30. 25	15. 13	·1380					
23. 28	36. 0								12. 55	32. 50	15. 29	·1374					
23. 36	37. 15								13. 8	30. 30	15. 38	·1376					
23. 40	36. 30								13. 39	39. 20	15. 50	·1373					
23. 53	36. 30								14. 0	29. 30	16. 6	·1380					
23. 56	37. 30								14. 13	29. 30	16. 13	·1379					
23. 59	37. 30								14. 26	28. 0	16. 26	·1382					
									14. 44	29. 10	16. 54	·1375					
									14. 55	29. 10	17. 19	·1377					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Sept.10		Sept.10						
h m	° ′ ″	h m		h m		h m	°	°
14. 58	20. 28. 5	18. 10	·1375					
15. 11	28. 10	18. 26	·1378					
15. 31	30. 40	18. 52	·1370					
15. 52	30. 25		***					
15. 55	31. 30	19. 56	·1374					
16. 9	31. 35	20. 21	·1368					
16. 25	33. 50	20. 40	·1372					
16. 33	31. 10	20. 44	·1365					
16. 41	30. 5	21. 6	·1358					
16. 53	27. 15	21. 11	·1350					
16. 55	27. 15	21. 54	·1351					
17. 9	25. 50	22. 6	·1354					
17. 16	28. 10	22. 20	·1353					
17. 37	29. 45	22. 41	·1361					
17. 41	28. 50	23. 4	·1360					
18. 7	31. 30	23. 59	·1365					
18. 15	31. 30							
18. 31	30. 20							
18. 39	31. 50							
18. 50	30. 40							
19. 11	29. 20							
19. 39	29. 5							
20. 3	31. 40							
20. 12	30. 35							
20. 41	31. 25							
21. 9	29. 30							
21. 12	31. 50							
21. 29	31. 50							
21. 56	36. 20							
22. 5	33. 45							
22. 11	34. 55							
22. 30	33. 35							
23. 20	35. 35							
23. 30	37. 25							
23. 59	38. 20							
Sept.11		Sept.11		Sept.11		Sept.11		
0. 0	20. 38. 20	0. 0	·1365	0. 0	·02794	1. 0	69 ·0	70 ·1
0. 56	40. 40	0. 35	·1364	4. 23	·02875	3. 0	68 ·0	70 ·7
1. 18	39. 40	0. 55	·1373	6. 22	·02868	Max.	69 ·4	71 ·6
1. 56	39. 55	1. 11	·1372	7. 8	·02873	9. 0	68 ·5	70 ·8
2. 12	38. 50	1. 53	·1376	8. 23	·02860	Min.	67 ·7	70 ·0
2. 29	38. 50	1. 54	·1379	9. 35	·02857	21. 0	68 ·6	70 ·1
2. 38	3[illegible]. 30	2. 13	·1372	10. 23	·02829			
2. 53	36. 15	2. 21	·1374	11. 3	·02828			
2. 57	34. 0	2. 34	·1371	13. 43	·02851			
3. 7	33. 15	2. 42	·1367	15. 46	·02797			
3. 13	32. 0	2. 58	·1363	17. 4	·02823			
3. 23	32. 50	3. 14	·1370	17. 45	·02809			
3. 29	31. 50	3. 24	·1374	21. 3	·02826			
3. 38	32. 30	3. 31	·1372	23. 59	·02829			
3. 49	31. 40	3. 41	·1377					
4. 13	33. 0	3. 50	·1372					
4. 30	36. 15	4. 5	·1378					
4. 53	36. 20	4. 34	·1371					
5. 0	35. 0	4. 40	·1372					
5. 25	34. 25	4. 43	·1[illegible]					
5. 44	34. 35	4. 55	·1377					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Sept.11		Sept.11						
h m	° ′ ″	h m		h m		h m	°	°
5. 59	20. 33. 45	5. 15	·1373					
6. 12	33. 45	5. 25	·1381					
6. 38	26. 50	5. 35	·1371					
6. 41	22. 0	5. 51	·1376					
6. 56	21. 35	5. 56	·1371					
7. 2	22. 50	6. 11	·1377					
7. 11	28. 55	6. 29	·1366					
7. 23	28. 55	6. 50	·1381					
7. 43	33. 20	7. 0	·1398					
7. 59	33. 50	7. 8	·1394					
8. 25	32. 5	7. 11	·1396					
8. 41	32. 25	7. 21	·1378					
9. 22	29. 50	7. 43	·1380					
9. 30	27. 0	7. 54	·1378					
9. 42	29. 35	8. 10	·1379					
9. 54	26. 30	8. 15	·1378					
10. 7	29. 5	8. 37	·1374					
10. 24	30. 0	8. 56	·1376					
10. 30	29. 45	9. 10	·1383					
10. 53	31. 30	9. 24	·1386					
11. 14	28. 20	9. 38	·1403					
11. 32	30. 0	9. 44	·1397					
11. 59	30. 0	9. 59	·1412					
12. 51	31. 15	10. 16	·1405					
13. 27	33. 15	10. 22	·1396					
13. 51	35. 50	10. 31	·1390					
14. 12	33. 30	10. 41	·1392					
14. 57	40. 20	11. 4	·1382					
15. 11	41. 10	11. 24	·1376					
15. 24	40. 40	11. 36	·1378					
15. 38	40. 40	11. 54	·1369					
15. 55	35. 0	12. 48	·1373					
16. 14	33. 45	12. 54	·1370					
16. 28	33. 45	13. 13	·1373					
16. 53	35. 0	13. 38	·1370					
17. 13	39. 25	13. 52	·1374					
17. 29	39. 25	14. 11	·1373					
17. 43	40. 25	14. 21	·1376					
18. 7	41. 15	14. 44	·1372					
18. 13	40. 20	15. 11	·1362					
18. 26	39. 0	15. 43	·1378					
18. 38	40. 35	15. 55	·1374					
18. 45	40. 0	16. 23	·1375					
18. 58	43. 30	16. 52	·1357					
19. 9	43. 10	17. 2	·1359					
19. 15	45. 25	17. 17	·1366					
19. 28	46. 35	18. 25	·1363					
19. 50	43. 35	18. 42	·1350					
19. 55	44. 45	18. 54	·1344					
20. 9	41. 50	18. 57	·1345					
20. 25	41. 30	19. 11	·1337					
20. 36	42. 10	19. 22	·1335					
20. 50	40. 0	19. 41	·1349					
21. 11	38. 50	19. 57	·1367					
21. 24	38. 50	20. 12	·1370					
21. 37	37. 25	20. 21	·1367					
21. 41	39. 5	20. 34	·1371					
21. 55	38. 45	20. 45	·1365					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 11		Sept. 11						
h m	° ′ ″	h m		h m		h m	°	°
21. 56	20. 37. 0	21. 44	·1356					
22. 23	38. 45	22. 25	·1362					
22. 48	37. 30	22. 42	·1360					
23. 11	37. 30	23. 24	·1362					
23. 53	41. 40	23. 59	·1359					
23. 59	41. 30							
Sept. 12		Sept. 12		Sept. 12		Sept. 12		
0. 0	20. 41. 30	0. 0	·1359	0. 0	·02829	1. 0	69·3	70·8
0. 13	41. 35	0. 17	·1366	2. 1	·02863	3. 0	69·1	71·1
0. 25	43. 0	0. 24	·1359	2. 46	·02919	Max.	69·5	71·7
0. 28	43. 20	0. 44	·1361	3. 53	·02901	9. 0	68·2	69·2
0. 33	43. 40	1. 22	·1367	5. 9	·02916	Min.	64·1	65·3
0. 39	43. 15	1. 36	·1374	5. 17	·02933	21. 0	66·6	68·0
1. 8	44. 15	1. 45	·1367	5. 31	·02916	22. 0	66·8	68·4
1. 10	44. 5	1. 58	·1336	5. 39	·02922	23. 0	67·0	68·8
1. 25	45. 40	2. 14	·1351	6. 40	·02887			
1. 48	42. 0	2. 25	·1347	8. 8	·02891			
1. 55	44. 55	2. 28	·1358	8. 27	·02882			
2. 6	41. 25	2. 35	·1367	8. 46	·02893			
2. 12	41. 25	2. 50	·1372	11. 51	·02777			
2. 19	38. 50	2. 55	·1368	13. 52	·02743			
2. 24	38. 50	3. 13	·1360	14. 39	·02711			
2. 26	40. 10	3. 26	·1367	17. 53:	·02672			
2. 34	40. 25	3. 37	·1365	20. 3	·02700			
2. 41	40. 10	3. 43	·1370	21. 12	·02698 ·02849			
2. 44	40. 30	3. 57	·1362					
3. 8	39. 20	4. 11	·1373	23. 59	·02842			
3. 22	40. 20	4. 40	·1378					
3. 26	40. 5	4. 49	·1370					
3. 40	40. 35	5. 7	·1370					
3. 56	39. 20	5. 15	·1385					
4. 37	39. 30	5. 21	·1404					
4. 41	38. 0	5. 32	·1385					
4. 54	37. 5	5. 41	·1391					
4. 58	35. 0	5. 50	·1373					
5. 12	27. 20	6. 0	·1378					
5. 23	31. 10	6. 10	·1374					
5. 27	28. 50	6. 15	·1377					
5. 40	32. 35	6. 42	·1370					
5. 44	32. 5	6. 56	·1368					
6. 1	34. 25	7. 10	·1374					
6. 11	33. 0	7. 25	·1372					
6. 25	33. 50	7. 42	·1378					
6. 41	33. 40	8. 11	·1373					
6. 50	32. 30	8. 20	·1367					
6. 59	30. 20	8. 27	·1385					
7. 18	30. 55	8. 43	·1397					
7. 32	30. 20	9. 5	·1382					
7. 41	31. 25	9. 29	·1376					
7. 53	31. 5	9. 38	·1378					
8. 4	31. 20	9. 55	·1367					
8. 24	23. 30	10. 43	·1374					
8. 44	30. 0	10. 51	·1382					
8. 57	31. 0	11. 20	·1381					
9. 8	30. 20	11. 42	·1377					
9. 14	31. 40	11. 52	·1380					
9. 26	31. 40	12. 51	·1376					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 12		Sept. 12						
h m	° ′ ″	h m		h m		h m	°	°
9. 42	20. 33. 15	13. 13	·1370					
9. 57	31. 25	14. 11	·1385					
10. 17	31. 10	15. 11	·1361					
10. 36	31. 10	15. 55	·1381					
10. 41	33. 0	16. 54	·1380					
11. 7	36. 0	17. 12	·1371					
11. 13	36. 20	17. 26	·1367					
11. 28	33. 30	18. 25	·1375					
11. 41	32. 0	18. 40	·1371					
11. 54	32. 0	18. 46	·1375					
12. 23	29. 10	19. 4	·1377					
12. 43	29. 50	19. 15	·1372					
13. 9	34. 15	21. 4	·1366					
13. 25	33. 30	21. 23	·1372					
13. 35	35. 20	22. 38	·1368					
13. 43	35. 20	22. 58	·1369					
14. 9	30. 45	23. 59	·1378					
14. 18	29. 50							
14. 49	33. 0							
14. 58	34. 30							
15. 23	36. 5							
15. 43	35. 10							
15. 54	33. 0							
16. 20	30. 55							
16. 26	31. 40							
17. 32	33. 0							
17. 41	34. 5							
17. 55	34. 5							
18. 11	33. 30							
18. 28	33. 20							
18. 39	32. 25							
18. 44	32. 25							
18. 54	33. 15							
19. 8	32. 20							
19. 14	34. 50							
19. 26	33. 0							
20. 59	33. 5							
21. 6	31. 55							
22. 41	35. 10							
22. 53	36. 40							
22. 56	35. 15							
23. 53	37. 20							
23. 59	37. 30							
Sept. 13		Sept. 13		Sept. 13		Sept. 13		
0. 0	20. 37. 30	0. 0	·1378	0. 0	·02842	0. 0	67·6	69·0
0. 12	37. 10	0. 45	·1383	2. 58	·02897	1. 0	67·8	69·1
0. 22	38. 0	0. 50	·1381	5. 56	·02920	2. 0	67·8	69·9
0. 26	37. 45	1. 24	·1380	6. 1	·02923	3. 0	67·8	69·1
0. 30	38. 5	1. 37	·1374	6. 34	·02934	Max.	68·9	71·5
0. 38	37. 50	1. 48	·1379	9. 3	·02934	9. 0	68·8	71·4
0. 41	38. 10	2. 0	·1367	11. 1	·02887	Min.	63·1	66·2
0. 52	38. 10	2. 10	·1379	18. 8	·02786	21. 0	66·1	68·1
0. 57	38. 35	2. 14	·1373	20. 51	·02811	22. 0	66·5	68·6
1. 41	37. 35	2. 21	·1373	23. 59	·02806	23. 0	66·7	68·8
1. 53	37. 50	2. 24	·1385					
1. 56	37. 20	2. 38	·1382					
2. 23	36. 35	3. 7	·1385					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Sept.13		Sept.13						
h m	° ′ ″	h m		h m		h m	°	°
2.26	20.37.55	3.25	·1377					
2.37	37. 0	3.44	·1382					
3. 7	36.25	4.23	·1383					
3.26	34.45	4.30	·1387					
4.23	33.50	5.11	·1383					
4.30	34.15	5.17	·1384					
4.40	34. 5	5.43	·1378					
5. 9	32.40	5.50	·1381					
5.28	32.50	5.57	·1378					
5.44	30. 0	6.14	·1382					
5.54	29.45	6.28	·1388					
5.58	28. 5	6.55	·1379					
6.23	26.30	7.40	·1385					
6.38	29.30	8. 0	·1382					
6.53	31.20	8.15	·1384					
7. 6	31.20	8.27	·1383					
7.26	32.55	8.58	·1388					
7.29	32.40	9.13	·1384					
7.55	32.40	9.20	·1387					
8. 3	32.10	9.41	·1383					
8.26	32.20	9.50	·1385					
8.38	31.35	10. 4	·1383					
8.42	31.30	11. 8	·1380					
8.56	30. 0	12.14	·1381					
9. 9	30.40	12.41	·1384					
9.23	29.25	13.58	·1381					
9.30	29.35	14.42	·1387					
9.41	29.10	15.14	·1383					
10. 9	30.50	15.42	·1386					
10.26	30.20	16. 5	·1385					
10.44	30.30	16.42	·1387					
11. 6	29.45	17.42	·1388					
11.13	30.30	18.20	·1380					
11.25	30.20	18.54	·1377					
12.28	31.30	19.12	·1378					
12.41	30.45	19.27	·1376					
13.24	30.45	21.19	·1375					
13.36	30.30	21.40	·1378					
13.42	30.50		***					
14. 3	33.20	23.59	·1376					
14.32	31.20							
14.43	31.20							
14.55	30.40							
15.10	31.35							
15.58	30.20							
16.39	30.30							
16.42	30.20							
17.24	30. 5							
17.37	29.30							
18. 9	29.55							
18.24	30.30							
18.56	30.30							
19.17	29.55							
19.36	28.50							
20. 7	28.15							
20.52	29. 5							
20.58	30. 0							
21.39	30.55							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Sept.13								
h m	° ′ ″	h m		h m		h m	°	°
21.43	20.31.40							
21.53	31.25							
22.42	33.50							
22.46	33.35							
23. 4	34.20							
23.13	35.15							
23.59	37.35							
Sept.14		Sept.14		Sept.14		Sept.14		
0. 0	20.37.35	0. 0	·1376	0. 0	·02806	0. 0	66·8	69·1
0.48	39.30	0.24	·1380	5.26	·02881	1. 0	67·6	69·4
1. 0	38.50	0.55	·1381	8.56	·02910	2. 0	67·5	69·6
1.26	39.35	1. 3	·1376	14. 1	·02802	3. 0	67·4	69·2
2.25	36.15	1.11	·1374	14.45	·02767	Max.	68·2	70·5
2.43	36. 0	1.26	·1382	18.33	·02762	9. 0	66·8	68·8
2.56	36.45	1.44	·1379	19. 2	·02775	Min.	64·1	66·2
4. 3	35. 0	2. 9	·1377	19.59	·02764	21. 0	66·6	67·7
4.22	34.20	2.27	·1376	20. 5	·02772			
4.35	34.20	2.50	·1378	23.59	·02791			
5. 0	33. 5	2.59	·1382					
5.25	32.35	3.31	·1378					
5.58	32.50	4.18	·1382					
6.24	32.25	4.40	·1377					
7. 6	32.35	4.54	·1379					
7.54	31.50	5. 8	·1378					
7.59	32. 5	5.57	·1385					
8.10	31. 0	6.47	·1387					
8.27	26.55	7.50	·1384					
8.58	30.30	8. 6	·1386					
9.23	31.40	8.25	·1384					
9.38	31.40	8.41	·1387					
9.58	32. 0	9.14	·1386					
11.10	31.45	9.52	·1388					
11.26	32. 5		***					
12.23	31. 5	10.29	·1389					
12.43	31.35	10.59	·1387					
12.57	32. 5	11.24	·1393					
13.12	31.50	11.48	·1390					
13.53	37.50	13.23	·1394					
14. 9	36. 0	13.53	·1392					
14.11	33.45	14.10	·1396					
14.36	31. 0	14.14	·1395					
14.44	29. 0	14.39	·1402					
14.58	28.50	14.47	·1394					
15.23	27.20	14.57	·1396					
15.38	27.35	15.14	·1392					
15.52	26.20	15.28	·1394					
16. 8	26.45	15.54	·1392					
16.26	27.35	16. 9	·1395					
16.29	27.35	16.20	·1392					
16.40	28.35	16.47	·1395					
16.55	27.25	17.21	·1396					
17.22	27.45	17.52	·1400					
17.43	30.40	18.12	·1394					
18.13	30.40	18.43	·1376					
18.27	33.10	19.17	·1385					
18.38	33.10	19.30	·1392					
19. 3	38.30	19.52	·1397					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.14		Sept.14						
h m	° ′ ″	h m		h m		h m	°	°
19. 11	20. 37. 20	20. 6	·1387					
19. 24	38. 0	20. 14	·1392					
19. 54	36. 0	20. 25	·1382					
20. 0	34. 15	20. 54	·1372					
20. 10	35. 50	21. 55	·1377					
20. 18	34. 35	22. 45	·1373					
20. 35	34. 0	23. 7	·1374					
21. 0	35. 40	23. 15	·1378					
21. 25	36. 30	23. 24	·1372					
21. 38	36. 30	23. 37	·1369					
22. 10	38. 45	23. 48	·1371					
22. 23	38. 45	23. 59	·1373					
22. 26	38. 10							
22. 37	39. 10							
22. 41	38. 35							
22. 54	39. 25							
23. 8	39. 25							
23. 13	41. 20							
23. 25	40. 0							
23. 39	39. 30							
23. 59	38. 10							
Sept.15		Sept.15		Sept.15		Sept.15		
0. 0	20. 38. 10	0. 0	·1373	0. 0	·02791	1. 0	67·6	69·2
0. 11	38. 10	0. 8	·1376	1. 34	·02842	3. 0	67·5	69·3
0. 22	37. 25	0. 19	·1373	2. 6	·02885	Max.	68·6	71·0
0. 29	39. 40	0. 34	·1384	2. 28	·02879	9. 0	67·5	70·0
0. 43	39. 20	0. 43	·1383	4. 14	·02912	Min.	64·2	66·4
0. 54	39. 45	0. 55	·1386	6. 7	·02890	21. 0	66·5	68·1
1. 9	39. 30	1. 10	·1382	7. 4	·02888			
1. 12	39. 50	1. 41	·1368	8. 59	·02901			
1. 23	37. 50	1. 51	·1372	10. 51	·02848			
1. 26	37. 50	2. 12	·1376	11. 0	·02861			
1. 38	36. 50	2. 26	·1370	11. 12	·02829			
1. 41	35. 35	2. 38	·1372	11. 56	·02814			
1. 56	34. 10	2. 42	·1369	12. 38	·02818			
2. 9	34. 55	3. 0	·1378	14. 40	·02817			
2. 11	34. 55	3. 17	·1375	14. 59	·02804			
2. 23	36. 20	3. 21	·1376	15. 28	·02800			
2. 41	35. 30	3. 31	·1372	17. 9	·02781			
3. 8	38. 25	3. 42	·1376	17. 41	·02769			
3. 19	37. 50	4. 5	·1375	18. 24	·02778			
3. 26	38. 15	4. 21	·1380	18. 59	·02772			
3. 38	37. 0	4. 34	·1370	19. 46	·02784			
3. 44	37. 10	4. 45	·1368	21. 3	·02790			
4. 7	37. 0	5. 13	·1379	23. 59	·02822			
4. 14	36. 20	5. 51	·1385					
4. 23	37. 20	6. 54	·1388					
4. 27	37. 30	7. 26	·1385					
4. 41	36. 15	7. 45	·1384					
4. 53	36. 0	8. 17	·1386					
4. 56	35. 10	8. 40	·1384					
5. 4	35. 10	9. 12	·1385					
5. 18	34. 30	9. 21	·1379					
5. 57	34. 45	10. 10	·1390					
6. 44	34. 5	10. 28	·1383					
7. 28	33. 30	10. 39	·1386					
7. 56	32. 30	11. 5	·1381					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.15		Sept.15						
h m	° ′ ″	h m		h m		h m	°	°
8. 24	20. 32. 30	11. 12	·1389					
8. 39	31. 50	11. 24	·1389					
8. 58	32. 5	11. 43	·1409					
9. 14	31. 35		***					
9. 33	31. 40	12. 18	·1386					
9. 43	30. 30		***					
10. 9	28. 30	14. 13	·1383					
10. 15	28. 35	14. 36	·1384					
10. 30	27. 20	14. 53	·1388					
10. 44	28. 30		***					
10. 58	28. 30	15. 42	·1389					
11. 12	35. 45	16. 12	·1382					
11. 29	25. 0	16. 28	·1380					
11. 38	25. 0	17. 15	·1399					
12. 30	30. 10	17. 40	·1392					
12. 44	30. 35	17. 52	·1380					
13. 6	29. 45	18. 13	·1377					
13. 45	29. 55	18. 41	·1395					
14. 7	31. 10	18. 52	·1395					
14. 22	30. 45	20. 31	·1382					
14. 27	31. 20	20. 41	·1384					
14. 38	30. 50	20. 49	·1389					
14. 42	31. 30	20. 58	·1386					
14. 47	32. 50	21. 29	·1367					
15. 7	29. 30	21. 38	·1370					
15. 32	31. 10	21. 41	·1369					
15. 40	30. 55	21. 58	·1372					
15. 46	32. 0	22. 6	·1367					
16. 0	31. 40	22. 12	·1377					
16. 11	32. 0	22. 15	·1374					
16. 26	33. 30	22. 24	·1380					
16. 38	32. 50		***					
16. 46	33. 30	22. 44	·1371					
16. 56	33. 0	23. 6	·1373					
17. 8	33. 10	23. 23	·1356					
17. 10	32. 30	23. 26	·1359					
17. 28	34. 20	23. 38	·1347					
17. 33	34. 20	23. 50	·1358					
18. 10	38. 0		(†)					
18. 24	40. 35							
18. 33	40. 25							
19. 9	32. 0							
19. 14	31. 30							
19. 42	31. 10							
19. 56	30. 20							
20. 12	30. 20							
20. 27	29. 30							
20. 37	29. 30							
20. 40	28. 10							
20. 56	31. 50							
21. 7	32. 50							
21. 8	31. 30							
21. 12	32. 30							
21. 36	31. 30							
21. 53	31. 30							
21. 57	30. 50							
22. 3	31. 55							
22. 9	31. 10							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.15								
h m	° ′ ″	h m		h m		h m	°	°
22. 13	20. 32. 45							
22. 24	32. 50							
22. 38	35. 40							
22. 48	34. 45							
23. 23	38. 0							
23. 28	37. 35							
23. 37	39. 45							
23. 50	35. 10							
23. 54	37. 50							
23. 56	35. 45							
23. 59	37. 30							
Sept.16		Sept.16		Sept.16		Sept.16		
0. 0	20. 37. 30		(†)	0. 0	·02822	1. 0	67·6	69·6
0. 23	39. 50	0. 28	·1373	2. 18	·02886	3. 0	68·0	69·8
0. 26	39. 35	0. 41	·1376	2. 31	·02911	Max.	69·2	70·8
0. 41	40. 40	0. 51	·1373	3. 4	·02933	9. 0	68·9	70·1
0. 52	40. 0	1. 6	·1379	3. 34	·02956	Min.	65·3	67·5
1. 2	41. 0	1. 22	·1377	5. 12	·02911	22. 0	67·5	69·0
1. 24	41. 0	1. 40	·1377	6. 29	·02903			
1. 40	40. 0	1. 52	·1390	7. 1	·02916			
1. 44	42. 0	2. 18	·1377	8. 23	·02893			
1. 56	43. 35	2. 23	·1380	8. 46	·02907			
2. 8	43. 0	2. 30	·1383	10. 39	·02910			
2. 12	37. 30	2. 42	·1376	11. 24	·02875			
2. 26	39. 10	3. 2	·1397	12. 28	·02856			
2. 41	33. 50	3. 22	·1375	12. 53	·02863			
2. 46	35. 0	3. 26	·1381	13. 45	·02848			
2. 58	38. 30	3. 35	·1374	14. 2	·02834			
3. 8	38. 50	3. 45	·1363	14. 23	·02837			
3. 21	36. 10	3. 55	·1370	15. 59	·02795			
3. 26	38. 35	4. 3	·1361	18. 28	·02802			
3. 39	39. 30	4. 18	·1391	20. 9	·02833			
3. 44	37. 0	4. 39	·1381	23. 59	·02859			
3. 53	37. 50	5. 26	·1384					
4. 1	30. 0	6. 5	·1382					
4. 10	31. 5	6. 40	·1384					
4. 24	35. 0	6. 53	·1393					
4. 31	34. 30	7. 19	·1384					
4. 50	33. 25	7. 40	·1417					
5. 11	34. 35	7. 53	·1398					
5. 26	33. 50	8. 0	·1392					
5. 40	33. 50	8. 22	·1363					
5. 56	33. 0	8. 54	·1377					
6. 6	33. 30	9. 15	·1373					
6. 14	32. 30	10. 32	·1379					
6. 25	32. 30	10. 50	·1394					
6. 31	31. 30	11. 13	·1397					
6. 41	29. 0	11. 27	·1386					
6. 55	30. 10	11. 55	·1392					
7. 15	12. 55	12. 26	·1378					
7. 38	23. 0	12. 33	·1383					
8. 9	32. 10	13. 12	·1382					
8. 16	30. 40	13. 44	·1385					
8. 26	24. 10	14. 4	·1367					
8. 39	25. 30	14. 22	·1360					
8. 46	25. 0	14. 50	·1377					
9. 8	28. 30	15. 45	·1389					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.16		Sept.16						
h m	° ′ ″	h m		h m		h m	°	°
9. 12	20. 28. 30	16. 10	·1376					
9. 23	29. 20	16. 27	·1377					
9. 41	31. 0	16. 41	·1384					
10. 8	31. 0	16. 51	·1382					
10. 24	33. 10	17. 3	·1384					
10. 30	32. 5	17. 34	·1372					
10. 49	34. 30	17. 45	·1373					
10. 57	34. 30	18. 11	·1371					
11. 11	36. 45	18. 22	·1374					
11. 24	35. 15	19. 4	·1376					
11. 39	36. 30	19. 35	·1378					
11. 55	34. 30	20. 0	·1372					
	(†)	20. 10	·1375					
12. 58	30. 0	20. 41	·1366					
13. 14	33. 25	20. 51	·1361					
13. 28	33. 10	20. 58	·1362					
13. 43	33. 30	21. 8	·1356					
13. 54	33. 25	21. 39	·1347					
14. 7	31. 0	21. 46	·1351					
14. 17	31. 15	22. 4	·1344					
14. 34	37. 0	22. 30	·1341					
14. 39	37. 0	23. 4	·1358					
14. 42	37. 55	23. 39	·1375					
14. 57	35. 20	23. 59	·1373					
15. 11	34. 40							
15. 26	32. 10							
15. 40	31. 25							
16. 5	33. 20							
16. 27	33. 30							
16. 38	30. 30							
16. 51	32. 15							
16. 58	31. 25							
17. 16	31. 50							
17. 24	31. 0							
17. 38	32. 40							
17. 44	31. 30							
18. 0	32. 20							
18. 23	31. 20							
18. 29	31. 20							
18. 55	30. 15							
19. 6	29. 50							
19. 15	30. 20							
19. 26	29. 50							
19. 37	30. 0							
19. 45	31. 10							
19. 56	30. 30							
20. 2	31. 55							
20. 11	30. 25							
20. 26	31. 10							
20. 38	30. 55							
20. 52	32. 40							
21. 0	32. 40							
22. 2	37. 15							
22. 8	37. 15							
22. 40	41. 30							
22. 44	41. 30							
22. 54	42. 30							
23. 22	40. 10							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.16								
h m	° ′ ″	h m		h m		h m	°	°
23. 41	20. 41. 15							
23. 52	40. 50							
23. 59	40. 40							
Sept.17		Sept.17		Sept.17		Sept.17		
0. 0	20. 40. 40	0. 0	·1373	0. 0	·02859	1. 0	68·4	69·7
0. 24	39. 55	0. 20	·1358	0. 11	·02869	Max.	68·8	71·2
0. 28	39. 0	0. 28	·1358	1. 9	·02904	9. 0	66·7	69·0
1. 7	37. 30	0. 44	·1369	3. 28	·02920	Min.	[illegible]·8	66·2
1. 12	38. 30	0. 53	·1367	4. 16	·02944	21. 0	66·6	66·7
1. 15	38. 30	1. 15	·1378	6. 29	·02936			
1. 37	39. 20	1. 29	·1377	7. 24	·02951			
1. 40	38. 30	1. 56	·1372	8. 59	·02943			
1. 44	39. 5	2. 25	·1376	11. 6	·02851			
2. 1	37. 45	2. 52	·1370	11. 19	·02862			
2. 42	37. 0	3. 5	·1371	11. 58	·02804			
2. 55	36. 30	3. 19	·1370	12. 4	·02799			
3. 0	36. 30	3. 28	·1374	12. 23	·02814			
3. 10	35. 50	3. 38	·1370	13. 15	·02806			
3. 24	35. 30	3. 41	·1372	15. 59	·02809			
3. 27	35. 50	3. 50	·1359	16. 48	·02777			
3. 29	34. 50	4. 11	·1368	19. 24	·02766			
3. 39	34. 50	4. 33	·1376	20. 31	·02792			
3. 42	33. 0	4. 45	·1375	23. 59	·02828			
3. 56	30. 15	4. 58	·1377					
3. 59	30. 15	5. 14	·1375					
4. 9	29. 20	5. 28	·1379					
4. 23	29. 20	5. 40	·1377					
4. 30	30. 5	6. 5	·1376					
4. 42	30. 5	6. 43	·1366					
5. 8	31. 30	7. 10	·1372					
5. 25	31. 50	7. 27	·1380					
5. 38	33. 5	7. 42	·1372					
5. 46	32. 35	8. 0	·1370					
6. 2	33. 0	8. 28	·1380					
6. 12	32. 30	8. 43	·1373					
6. 23	31. 30	8. 55	·1381					
6. 27	30. 50	9. 15	·1380					
6. 41	28. 0	9. 38	·1392					
6. 53	26. 0	9. 53	·1391					
6. 57	26. 0	11. 15	·1374					
7. 13	24. 0	11. 24	·1377					
7. 41	29. 0	11. 36	·1367					
7. 50	29. 0	11. 44	·1367					
8. 14	30. 25	11. 56	·1374					
8. 26	27. 50	12. 5	·1372					
8. 38	28. 5	12. 20	·1380					
8. 43	27. 0	12. 38	·1378					
8. 56	27. 0	12. 54	·1389					
9. 9	30. 0	13. 25	·1379					
9. 14	30. 20	13. 39	·1381					
9. 25	30. 0	13. 54	·1375					
9. 37	31. 10	14. 24	·1374					
9. 44	29. 30	14. 30	·1372					
9. 54	29. 5	14. 55	·1374					
9. 57	29. 30	15. 27	·1368					
10. 7	28. 40	15. 42	·1372					
10. 15	28. 20	16. 12	·1389					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.17		Sept.17						
h m	° ′ ″	h m		h m		h m	°	°
10. 28	20. 29. 0	16. 30	·1394					
10. 58	21. 20	17. 54	·1382					
11. 26	34. 30	18. 21	·1373					
11. 43	28. 45	18. 47	·1382					
11. 57	25. 0	18. 54	·1383					
12. 7	25. 0	19. 22	·1380					
12. 23	29. 0	20. 6	·1371					
12. 44	28. 0	21. 20	·1369					
13. 12	23. 45	21. 36	·1371					
13. 28	22. 0	21. 40	·1368					
13. 54	24. 25	21. 46	·1372					
14. 7	28. 0	21. 54	·1370					
14. 14	29. 0	22. 0	·1373					
14. 24	28. 0	22. 9	·1368					
14. 28	28. 0	22. 37	·1376					
14. 37	27. 10	22. 48	·1370					
14. 42	27. 10	23. 4	·1373					
14. 58	29. 35	23. 45	·1371					
15. 10	29. 35	23. 59	·1375					
15. 38	33. 30							
16. 0	37. 0							
16. 24	34. 10							
16. 40	32. 30							
16. 56	32. 50							
17. 10	32. 5							
17. 22	32. 50							
17. 25	32. 30							
17. 39	32. 50							
18. 9	36. 15							
18. 39	40. 25							
19. 23	35. 0							
19. 43	30. 30							
20. 31	29. 35							
21. 0	30. 0							
21. 27	30. 45							
21. 37	30. 20							
21. 42	31. 35							
21. 46	31. 35							
21. 55	32. 15							
22. 3	31. 55							
22. 26	34. 50							
22. 40	34. 50							
23. 59	38. 40							
Sept.18		Sept.18		Sept.18		Sept.18		
0. 0	20. 38. 40	0. 0	·1375	0. 0	·02828	1. 0	67·3	68·8
0. 22	39. 45	0. 9	·1377	4. 24	·02898	3. 0	67·5	69·0
0. 36	39. 25	0. 14	·1379	9. 4	·02917	Max.	68·5	70·2
1. 9	40. 50	0. 22	·1375	10. 39	·02836	9. 0	65·6	67·5
1. 23	41. 5	1. 11	·1380	16. 40	·02683	Min.	61·0	62·6
1. 43	40. 20	2. 27	·1374	17. 32	·02647	21. 0	64·5	65·7
1. 58	39. 25	3. 11	·1378	18. 34	·02649			
2. 26	38. 0	3. 29	·1372	20. 32	·02682			
2. 41	38. 0	4. 7	·1383	23. 59	·02691			
2. 56	37. 10	4. 40	·1382					
3. 11	37. 30	5. 2	·1385					
3. 38	34. 0	5. 25	·1383					
4. 6	32. 45	5. 41	·1386					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 18		Sept. 18						
h m	° ′ ″	h m		h m		h m	°	°
4. 34	20. 33. 25	7. 51	·1384					
5. 29	32. 40	8. 41	·1387					
6. 16	32. 50	9. 4	·1382					
7. 8	32. 30	9. 31	·1385					
7. 24	32. 50	9. 52	·1390					
7. 37	32. 0	10. 40	·1388					
7. 53	31. 45	11. 10	·1387					
8. 5	32. 5	11. 31	·1386					
8. 24	32. 0	11. 49	·1392					
8. 27	31. 25	12. 10	·1386					
8. 52	32. 50	12. 44	·1389					
9. 9	32. 0	15. 55	·1391					
9. 25	32. 35	16. 25	·1381					
9. 40	31. 0	17. 10	·1409					
9. 58	34. 30	17. 34	·1394					
10. 12	33. 55	18. 20	·1392					
10. 39	30. 0	18. 30	·1395					
10. 58	29. 25	19. 13	·1392					
11. 6	30. 5	19. 41	·1387					
11. 23	29. 0	21. 22:	·1378					
11. 39	29. 55	22. 26	·1377					
12. 9	30. 25	23. 30	·1383					
12. 38	31. 30	23. 59	·1387					
12. 41	30. 50							
12. 54	31. 0							
13. 9	30. 0							
14. 8	30. 0							
14. 39	29. 45							
14. 59	28. 55							
15. 25	29. 0							
15. 41	30. 25							
15. 53	29. 50							
16. 8	31 0							
16. 39	34. 50							
16. 53	34. 0							
17. 7	31. 30							
17. 22	31. 15							
17. 46	33. 0							
18. 15	32. 0							
18. 24	32. 10							
18. 54	30. 45							
19. 51	29. 40							
20. 8	30. 25							
20. 55	30. 35							
21. 2	31. 20							
21. 22	31. 20							
23. 23	35. 50							
23. 59	36. 55							
Sept. 19		Sept. 19		Sept. 19		Sept. 19		
0. 0	20. 36. 55	0. 0	·1387	0. 0	·02691	1. 0	66·0	67·7
0. 28	36. 45	1. 12	·1391	4. 12	·02766	3. 0	66·3	68·1
1. 7	36. 30	2. 29	·1389	6. 54	·02738	Max.	67·1	69·2
2. 25	34. 15	2. 37	·1386	9. 3	·02813	9. 0	65·5	67·0
2. 38	33. 50	3. 9	·1389	11. 12	·02766	Min.	62·5	66·2
4. 8	32. 55	3. 42	·1387	15. 33	·02707	21. 0	64·4	66·4
4. 12	32. 35	5. 43	·1391	17. 51	·02656	22. 0	64·6	66·1
5. 26	32. 5	5. 54	·1393	18. 56	·02656	23. 0	65·3	67·2

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 19		Sept. 19		Sept. 19				
h m	° ′ ″	h m		h m		h m	°	°
6. 42	20. 32. 15	6. 11	·1390	19. 39	·02663			
10. 15	31. 5	6. 34	·1392	23. 59	·02691			
10. 27	31. 30	8. 57	·1389					
11. 41	30. 40	10. 21	·1390					
12. 23	30. 20	10. 28	·1397					
12. 39	30. 0	10. 41	·1394					
12. 55	30. 0	11. 49	·1392					
13. 9	28. 10	11. 55	·1397					
13. 13	28. 45	12. 13	·1395					
13. 24	28. 45	12. 30	·1398					
13. 41	29. 20	12. 41	·1396					
14. 5	28. 15	12. 49	·1402					
14. 22	27. 45	12. 59	·1391					
14. 36	28. 10	13. 17	·1395					
15. 7	30. 20	13. 34	·1394					
15. 12	30. 5	13. 48	·1396					
15. 24	29. 30	14. 34	·1392					
15. 33	30. 40	15. 10	·1398					
16. 10	30. 10	15. 18	·1396					
16. 23	28. 55	15. 38	·1402					
16. 38	27. 5	15. 48	·1400					
16. 55	26. 5	16. 18	·1406					
17. 9	25. 30	16. 37	·1409					
17. 22	26. 35	17. 18	·1406					
17. 28	26. 35	17. 39	·1407					
17. 42	27. 10	17. 58	·1403					
18. 15	29. 30	18. 16	·1405					
18. 25	29. 0	18. 27	·1402					
18. 35	29. 50	18. 48	·1399					
18. 41	30. 35	18. 53	·1394					
18. 53	30. 30	19. 5	·1393					
19. 9	31. 20	19. 24	·1384					
19. 12	31. 10	19. 41	·1393					
19. 26	32. 40	19. 49	·1387					
19. 37	32. 45	20. 15	·1388					
19. 41	33. 25	20. 23	·1385					
19. 50	32. 20	20. 38	·1387					
19. 58	32. 50	21. 11	·1377					
20. 14	34. 30	21. 30	·1380					
20. 26	34. 0	21. 49	·1374					
20. 31	35. 10	22. 4	·1372					
20. 43	34. 25	22. 41	·1375					
20. 56	34. 25	22. 58	·1361					
21. 0	33. 50	23. 24	·1372					
21. 13	33. 50	23. 45	·1361					
21. 39	35. 30	23. 59	·1372					
21. 41	35. 10							
22. 28	37. 5							
22. 44	37. 30							
23. 0	38. 25							
23. 23	41. 10							
23. 37	44. 45							
23. 59	41. 40							
Sept. 20		Sept. 20		Sept. 20		Sept. 20		
0. 0	20. 41. 40	0. 0	·1372	0. 0	·02691	0. 0	65·1	67·9
0. 8	40. 0	0. 33	·1384	2. 33	·02775	1. 0	65·8	67·5
0. 56	41. 10	0. 41	·1386	3. 4	·02778	2. 0	65·6	68·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.20		Sept.20		Sept.20		Sept.20		
h m	° ′ ″	h m		h m		h m	°	°
1. 6	20. 40. 55	0. 56	·1384	4. 16	·02851	3. 0	65·6	68·0
1. 38	42. 30	1. 11	·1380	5. 1	·02848	Max.	67·0	68·8
1. 42	41. 50	1. 38	·1383	5. 13	·02867	9. 0	63·8	65·7
1. 50	42. 40	1. 42	·1382	6. 2	·02848	Min.	61·2	62·6
1. 58	42. 0	1. 49	·1387	6. 12	·02856	21. 0	64·6	66·0
2. 11	41. 50	2. 4	·1380	6. 24	·02831	22. 0	61·3	65·0
2. 23	40. 35	2. 14	·1382	6. 38	·02806	23. 0	61·6	64·3
2. 31	40. 25	2. 30	·1378	6. 57	·02815			
2. 49	42. 30	2. 46	·1385	7. 4	·02805			
2. 53	42. 5	2. 56	·1382	7. 40	·02822			
2. 56	42. 5	3. 12	·1381	8. 38	·02822			
3. 7	41. 30	3. 37	·1374	8. 54	·02823			
3. 12	42. 25	3. 46	·1380	9. 40	·02776			
3. 23	42. 15	3. 54	·1372	11. 15	·02716			
3. 27	42. 25	4. 5	·1368	13. 46	·02674			
3. 37	39. 15	4. 24	·1371		***			
3. 41	38. 50	4. 30	·1364	16. 47	·02683			
3. 54	39. 20	4. 41	·1369	21. 3	·02697			
3. 58	37. 0	4. 56	·1368	22. 13	·02678			
4. 9	34. 55	5. 4	·1364	23. 2	·02659			
4. 16	36. 0	5. 11	·1356	23. 59	·02662			
4. 27	34. 55	5. 26	·1379					
4. 30	33. 35	5. 58	·1374					
5. 5	33. 35	6. 14	·1373					
5. 11	28. 50	6. 26	·1396					
5. 23	28. 30	6. 32	·1395					
5. 42	32. 30	6. 40	·1404					
5. 53	33. 5	6. 48	·1373					
6. 10	31. 50	6. 59	·1384					
6. 23	24. 55	7. 15	·1365					
6. 28	31. 10	7. 45	·1380					
6. 33	30. 50	8. 14	·1374					
6. 39	32. 0	8. 35	·1379					
6. 54	24. 0	8. 45	·1376					
7. 9	30. 0	9. 0	·1382					
7. 23	26. 50	9. 34	·1377					
7. 34	28. 10	10. 11	·1389					
7. 40	28. 5	10. 57	·1389					
7. 55	30. 15	11. 13	·1393					
7. 58	29. 45	11. 30	·1390					
8. 13	29. 25	11. 54	·1396					
8. 36	29. 30	12. 15	·1393					
8. 43	28. 35	14. 4	·1389					
9. 10	29. 30	14. 25	·1396					
9. 26	26. 35	14. 42	·1391					
9. 54	28. 0	14. 47	·1395					
10. 0	27. 20	15. 11	·1395					
10. 13	28. 35	15. 19	·1399					
10. 24	28. 0	15. 39	·1395					
10. 30	28. 10	15. 56	·1397					
10. 43	29. 50	16. 34	·1396					
11. 2	29. 50	16. 53	·1384					
11. 25	28. 45	17. 16	·1386					
11. 37	29. 30	17. 37	·1384					
12. 11	26. 15	18. 10	·1389					
12. 20	26. 35	18. 41	·1384					
13. 8	24. 45	19. 22	·1388					
13. 28	24. 45	19. 42	·1384					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.20		Sept.20						
h m	° ′ ″	h m		h m		h m	°	°
13. 39	20. 24. 20	19. 56	·1378					
13. 54	25. 30	20. 14	·1383					
14. 23	27. 10	20. 43	·1372					
14. 42	28. 25	21. 27	·1367					
14. 54	27. 40	22. 24	·1364					
15. 8	27. 40	23. 4	·1369					
15. 26	26. 20		***					
15. 39	26. 20	23. 44	·1370					
15. 58	29. 10	23. 59	·1375					
16. 30	29. 50							
16. 42	31. 30							
16. 52	31. 30							
17. 30	35. 30							
17. 41	35. 0							
18. 7	35. 30							
18. 11	36. 20							
18. 30	36. 5							
18. 52	37. 40							
19. 9	36. 45							
19. 26	34. 30							
19. 30	34. 30							
19. 41	33. 10							
19. 54	33. 40							
19. 57	32. 40							
20. 6	33. 5							
20. 11	32. 45							
20. 24	34. 0							
20. 41	34. 10							
20. 57	33. 10							
21. 28	34. 35							
21. 43	34. 40							
21. 55	37. 0							
21. 57	37. 0							
22. 18	40. 30							
22. 26	40. 45							
22. 43	39. 50							
23. 10	41. 30							
23. 54	38. 45							
23. 59	39. 30							
Sept.21		Sept.21		Sept.21		Sept.21		
0. 0	20. 39. 30	0. 0	·1375	0. 0	·02662	0. 0	63·7	65·8
0. 26	40. 45	0. 13	·1381	2. 4	·02704	1. 10	64·6	66·4
0. 45	40. 20	0. 42	·1375	3. 46	·02715	Max.	65·1	66·9
1. 11	44. 5	0. 56	·1363	4. 12	·02702	3. 0	63·6	66·1
1. 26	41. 15	1. 10	·1366	5. 8	·02721	9. 0	62·3	64·0
1. 41	40. 45	1. 13	·1362	7. 23	·02685	Min.	59·8	61·6
1. 44	39. 40	1. 30	·1379	8. 28	·02622	21. 0	61·9	64·0
2. 10	37. 25	2. 11	·1391	8. 41	·02609			
2. 15	37. 25	2. 49	·1393	9. 7	·02621			
2. 38	36. 50	2. 58	·1397	10. 56	·02613			
2. 54	36. 55	3. 15	·1390	13. 31	·02560			
3. 0	37. 50	3. 38	·1399	17. 33	·02532			
3. 14	36. 30	3. 46	·1390	18. 41	·02541			
3. 40	37. 10	3. 57	·1395	22. 43	·02545			
3. 51	36. 20	4. 15	·1379		(†)			
3. 57	36. 25	4. 24	·1376	23. 45	·02416			
4. 10	35. 20	4. 44	·1390	23. 59	·02418			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Sept.21		Sept.21							Sept·21								
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
4. 38	20. 34. 35	4. 55	·1384						22. 8	20. 31. 30							
4. 58	33. 0	5. 14	·1391						23. 42	39. 10							
5. 14	33. 0	5. 38	·1380						23. 54	38. 50							
5. 26	31. 50		***						23. 59	39. 30							
5. 43	33. 30	5. 52	·1374														
5. 56	32. 35	6. 10	·1380						Sept.22		Sept.22		Sept.22		Sept.22		
6. 13	32. 35	6. 17	·1377						0. 0	20. 39. 30	0. 0	·1376	0. 0	·02418	1. 0	64·2	66·2
6. 25	31. 40	7. 13	·1394						0. 27	40. 5	0. 20	·1374	4. 34	·02521	3. 0	64·5	66·0
6. 39	32. 30	7. 23	·1392						0. 38	40. 30	2. 24	·1381	4. 54	·02514	Max.	64·6	66·8
6. 42	32. 10	7. 42	·1403						1. 58	39. 25	2. 44	·1386	5. 19	·02531	9. 0	61·6	63·8
7. 9	32. 30	7. 52	·1396						2. 9	39. 25	4. 12	·1382	5. 53	·02526	Min.	57·6	60·3
7. 23	31. 30	8. 14	·1423						2. 14	38. 40	4. 35	·1379	8. 4	·02533	21. 0	60·3	62·5
7. 32	28. 50	8. 26	·1418						2. 41	38. 50	4. 52:	·1388	8. 13	·02532			
7. 43	29. 30	8. 35	·1422						3. 26	37. 0	5. 11	·1377	8. 26	·02544			
8. 10	20. 0	8. 49	·1377						3. 42	36. 50	5. 27	·1398	11. 57	·02422			
8. 28	27. 55	9. 11	·1413						4. 6	35. 30	5. 48	·1394	12. 10	·02398			
8. 37	28. 35	9. 16	·1405						4. 22	35. 30	6. 6	·1385	12. 53	·02372			
8. 43	31. 50	9. 25	·1405						4. 38	33. 50	7. 29	·1391	13. 29	·02368			
8. 53	24. 15	9. 48	·1393						4. 50	34. 0	8. 14	·1385	17. 12	·023[illegible]			
9. 0	20. 30	10. 10	·1397						4. 59	32. 0	8. 40	·1406	20. 51	·02269			
9. 12	25. 30		***						5. 11	27. 20	8. 55	·1392	23. 59	·022[illegible]			
9. 17	26. 10	10. 42	·1390						5. 53	33. 55	9. 26	·1381					
9. 34	29. 40		***						5. 59	33. 30	9. 44	·1387					
9. 43	28. 50	11. 57	·1394						6. 11	34. 0	10. 25	·1391					
9. 55	28. 50	12. 26	·1393						6. 59	34. 0	11. 6	·1392					
10. 11	30. 5		***						7. 10	33. 40	11. 20	·1394					
10. 28	28. 50	13. 14	·1397						7. 14	33. 40	11. 29	·1391					
10. 43	29. 25		***						7. 25	33. 10	11. 39	·1396					
10. 56	29. 25	16. 26	·1395						7. 37	33. 35	11. 44	·1394					
11. 36	31. 15	17. 3	·1400						7. 57	32. 40	12. 11	·1400					
12. 42	30. 30	17. 42	·1387						8. 23	22. 50	12. 27	·1413					
13. 8	31. 15	18. 46	·1396						8. 57	28. 40	13. 3	·1392					
13. 37	30. 30	19. 12	·1394						9. 8	28. 40	13. 14	·1389					
14. 9	30. 0	20. 10	·1390						9. 23	30. 5	13. 43	·1391					
14. 14	30. 50	21. 25	·1377						9. 30	30. 5	14. 9	·1389					
14. 25	30. 30	22. 45	·1373						10. 9	32. 40	14. 25	·1390					
14. 37	31. 15	22. 56	·1367						10. 29	33. 0	14. 49	·1394					
14. 50	31. 15	23. 38	·1372						10. 56	32. 0	15. 5	·1392					
14. 56	30. 50	23. 59	·1376						11. 11	32. 0	16. 44	·1396					
15. 26	31. 20								11. 29	30. 0	18. 36	·1394					
15. 38	30. 55								11. 38	32. 0	19. 0	·1391					
15. 56	30. 55								11. 58	36. 10	19. 24	·1385					
16. 9	30. 20								12. 23	28. 0	20. 14	·1387					
16. 41	31. 30								13. 12	26. 50	21. 24	·1380					
17. 0	30. 20								13. 41	28. 15	22. 49	·1374					
17. 13	30. 10								13. 56	28. 15	22. 57	·1377					
17. 39	31. 30								14. 8	28. 55	23. 38	·1376					
17. 51	31. 30								14. 10	28. 40	23. 59	·1380					
18. 0	32. 15								14. 41	30. 15							
18. 25	30. 55								15. 0	29. 35							
18. 29	30. 0								15. 14	30. 30							
18. 40	29. 45								15. 26	30. 0							
19. 1	30. 10								15. 41	30. 0							
19. 12	29. 0								15. 56	31. 15							
19. 27	29. 30								16. 8	30. 45							
19. 52	29. 15								16. 14	31. 10							
20. 51	29. 30								16. 36	31. 20							
21. 30	30. 20								16. 42	31. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.22								
h m	° ′ ″	h m		h m		h m	°	°
17. 9	20. 31. 33							
17. 50	31. 35							
18. 2	31. 0							
18. 25	31. 35							
18. 38	31. 15							
18. 46	32. 0							
18. 54	31. 20							
18. 58	32. 0							
19. 27	31. 30							
19. 53	31. 50							
20. 41	33. 0							
21. 7	32. 35							
22. 44	36. 15							
23. 5	38. 0							
23. 23	38. 25							
23. 31	38. 25							
23. 59	39. 30							
Sept.23		Sept.23		Sept.23		Sept.23		
0. 0	20. 39. 30	0. 0	·1380	0. 0	·02296	1. 0	62 ·2	64 ·0
0. 28	40. 0	0. 14	·1383	4. 53	·02392	3. 0	62 ·5	64 ·0
0. 54	41. 0	0. 36	·1388	8. 48	·02397	Max.	62 ·9	65 ·2
1. 41	41. 30	1. 10	·1390	10. 12	·02348	9. 0	60 ·6	62 ·8
2. 11	40. 30	1. 50	·1394	12. 57	·02329	Min.	60 ·3	52 ·0
2. 24	40. 50	2. 12	·1391	18. 0	·02334	22. 0	62 ·6	65 ·0
2. 40	39. 30	2. 24	·1396	20. 26	·02362			
3. 12	38. 50	2. 41	·1392	23. 59	·02363			
4. 56	35. 10	3. 6	·1395					
5. 10	34. 40	3. 41	·1392					
5. 30	34. 30	3. 55	·1394					
5. 56	34. 50	4. 18	·1392					
6. 12	33. 45	5. 24	·1393					
6. 41	32. 50	6. 14	·1392					
7. 9	32. 50	6. 39	·1390					
7. 25	33. 20	7. 33	·1392					
7. 57	33. 0	8. 10	·1390					
8. 11	32. 0	8. 26	·1393					
8. 24	32. 30	8. 45	·1392					
8. 41	31. 30	9. 6	·1404					
8. 58	26. 10	9. 18	·1404					
9. 12	25. 50	9. 32	·1408					
9. 38	28. 0	10. 14	·1399					
10. 10	28. 55	11. 11	·1391					
10. 38	28. 25	12. 11	·1390					
11. 12	31. 0	12. 28	·1395					
11. 26	31. 0	12. 49	·1396					
12. 4	32. 50	13. 41	·1393					
12. 43	32. 0	14. 0	·1396					
12. 53	32. 15	14. 15	·1394					
13. 37	31. 55	14. 56	·1396					
13. 57	33. 10	15. 30	·1394					
14. 12	32. 0	15. 42	·1396					
	***	15. 56	·1394					
14. 38	32. 0	17. 21	·1395					
14. 40	31. 30	17. 28	·1398					
14. 55	32. 35	18. 0	·1390					
15. 20	32. 0	18. 37	·1393					
15. 41	33. 0	18. 54	·1390					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.23		Sept.23						
h m	° ′ ″	h m		h m		h m	°	°
15. 57	20. 32. 5	19. 7	·1391					
17. 8	33. 0	20. 22	·1385					
17. 20	32. 45	20. 34	·1386					
18. 5	33. 40	22. 5	·1372					
18. 31	32. 20	22. 49	·1371					
18. 41	32. 30	23. 39	·1375					
18. 56	31. 45	23. 59	·1380					
19. 28	30. 45							
20. 12	30. 20							
20. 26	31. 10							
21. 8	31. 50							
21. 56	33. 35							
22. 41	36. 10							
22. 54	36. 10							
23. 59	40. 25							
Sept.24		Sept.24		Sept.24		Sept.24		
0. 0	20. 40. 25	0. 0	·1380	0. 0	·02363	1. 0	63 ·8	66 ·0
0. 29	41. 40	1. 19	·1386	4. 34	·02468	Max.	64 ·5	66 ·9
0. 53	42. 10	1. 45	·1389	8. 9	·02487	8. 0	63 ·1	65 ·8
1. 10	41. 55	1. 57	·1387	12. 30	·02352	Min.	56 ·1	59 ·1
1. 30	42. 10	3. 18	·1392	13. 0	·02326	21. 0	60 ·6	64 ·6
1. 55	41. 15	4. 34	·1393	15. 51	·02240			
2. 59	38. 20	4. 38	·1397	18. 12	·02218			
3. 41	37. 10	4. 45	·1392	20. 13	·02267			
4. 24	36. 0	5. 41	·1394	22. 11	·02261			
4. 28	36. 30	5. 59	·1392	23. 59	·02297			
5. 53	34. 30	7. 48	·1396					
6. 12	35. 5	8. 44	·1391					
6. 29	35. 15	9. 17	·1397					
7. 4	34. 50	9. 58	·1391					
7. 10	34. 10	10. 14	·1394					
8. 11	34. 10	11. 5	·1390					
8. 23	33. 45	11. 19	·1399					
8. 50	33. 30	11. 52	·1392					
9. 9	32. 30	12. 22	·1398					
9. 23	33. 0	12. 40	·1398					
9. 56	31. 10	13. 10	·1402					
10. 10	31. 30	13. 43	·1397					
10. 32	31. 10	14. 56	·1401					
10. 43	31. 30	16. 18	·1402					
10. 57	31. 0	17. 14	·1408					
11. 10	28. 25	18. 1	·1408					
11. 28	28. 20	18. 53	·1402					
11. 56	30. 0	19. 37	·1396					
12. 4	30. 20	20. 4	·1386					
	(†)	20. 41	·1380					
12. 42	32. 35	21. 12	·1379					
12. 53	31. 30	21. 27	·1372					
13. 5	29. 30	22. 14	·1368					
13. 22	28. 20	22. 41	·1372					
13. 38	28. 5	22. 54	·1370					
13. 42	29. 0	23. 14	·1375					
14. 9	30. 25	23. 33	·1377					
14. 19	31. 30	23. 59	·1379					
15. 26	31. 30							
15. 53	32. 15							
15. 58	32. 0							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.24								
h m	° ′ ″	h m		h m		h m	°	°
16. 24	20. 32. 20							
16. 30	33. 15							
16. 57	31. 40							
17. 42	31. 25							
18. 14	32. 20							
18. 38	32. 10							
18. 54	32. 30							
19. 8	31. 50							
19. 24	32. 15							
19. 43	31. 20							
20. 12	31. 50							
20. 15	32. 45							
20. 23	32. 10							
20. 45	33. 30							
21. 4	34. 30							
21. 25	34. 30							
21. 41	34. 55							
21. 53	35. 45							
22. 23	36. 0							
22. 53	38. 10							
22. 57	37. 50							
23. 59	40. 50							
Sept.25		Sept.25		Sept.25		Sept.25		
0. 0	20. 40. 50	0. 0	·1379	0. 0	·02297	1. 0	62 ·6	65 ·0
0. 37	43. 10	0. 28	·1387	3. 34	·02381	3. 0	63 ·1	65 ·7
1. 11	42. 35	1. 3	·1379	4. 0	·02404	Max.	64 ·5	68 ·2
1. 29	42. 45	1. 34	·1381	7. 56	·02468	9. 0	64 ·1	65 ·5
1. 41	42. 25	1. 42	·1377	9. 4	·02472	Min.	59 ·8	63 ·3
2. 23	43. 0	2. 19	·1384	12. 21	·02408	21. 0	62 ·2	64 ·4
2. 41	41. 50	2. 41	·1379	12. 34	·02409			
2. 54	41. 55	3. 11	·1385	14. 39	·02375			
3. 10	42. 20	3. 40	·1372	18. 16	·02355			
3. 41	41. 45	3. 52	·1375	19. 54	·02361			
3. 50	42. 20	4. 44	·1374	21. 9	·02361			
4. 8	41. 30	6. 14	·1383	23. 59	·02394			
4. 42	41. 10	6. 33	·1380					
4. 55	39. 40	7. 7	·1385					
5. 22	38. 0	7. 28	·1384					
6. 9	36. 0	7. 41	·1387					
6. 22	35. 0	8. 11	·1385					
6. 27	34. 45	8. 34	·1387					
6. 44	33. 30	8. 54	·1384					
7. 12	34. 5	11. 25	·1387					
8. 30	34. 5	11. 52	·1396					
10. 8	33. 10	12. 36	·1387					
10. 56	32. 45	13. 10	·1386					
11. 12	32. 0	13. 16	·1387					
11. 23	32. 35	13. 57	·1386					
11. 42	32. 35	14. 22	·1388					
12. 28	30. 40	14. 49	·1389					
13. 13	32. 35	14. 55	·1388					
13. 58	32. 0	16. 34	·1392					
14. 16	32. 40	16. 46	·1397					
14. 43	32. 40	16. 53	·1392					
14. 56	32. 20	17. 15	·1394					
15. 44	32. 35	18. 25	·1394					
16. 40	32. 30	18. 38	·1392					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.25		Sept.25						
h m	° ′ ″	h m		h m		h m	°	°
16. 44	20. 33. 20	18. 43	·1394					
16. 55	32. 5	22. 25	·1374					
18. 26	31. 45	23. 37	·1375					
18. 38	31. 10	23. 59	·1375					
19. 24	30. 30							
19. 27	30. 45							
19. 45	30. 10							
19. 58	30. 35							
20. 9	30. 0							
20. 13	30. 35							
20. 24	30. 20							
20. 54	30. 20							
22. 28	32. 50							
23. 26	35. 30							
23. 38	35. 20							
23. 56	36. 40							
23. 59	36. 30							
Sept.26		Sept.26		Sept.26		Sept.26		
0. 0	20. 36. 30	0. 0	·1375	0. 0	·02394	1. 0	63 ·9	65 ·8
0. 10	36. 30	0. 36	·1381	2. 50	·02410	3. 0	64 ·0	66 ·5
0. 22	37. 25	1. 13	·1385	4. 55	·02462	Max.	64 ·9	67 ·5
0. 27	37. 40	1. 48	·1387	5. 38	·02465	9. 0	64 ·3	66 ·5
0. 56	38. 20	2. 23	·1385	8. 59	·02534	Min.	59 ·4	63 ·3
1. 9	38. 35	2. 50	·1389	9. 18	·02530	21. 0	62 ·2	64 ·2
1. 26	38. 25	3. 20	·1388	12. 34	·02434			
1. 41	38. 40	3. 25	·1393	17. 3	·02365			
2. 4	38. 20	3. 44	·1384	18. 32	·02354			
2. 26	38. 20	4. 6	·1391	23. 9	·02368			
2. 37	39. 0	4. 24	·1384	23. 59	·02396			
2. 41	38. 30	4. 40	·1386					
2. 50	38. 50	4. 54	·1385					
2. 56	38. 30	5. 12	·1388					
3. 2	39. 15	5. 41	·1382					
3. 15	38. 50	6. 11	·1391					
3. 26	39. 30	6. 16	·1388					
3. 36	38. 40	6. 29	·1388					
4. 4	38. 50	6. 40	·1392					
4. 46	38. 0	6. 47	·1386					
5. 30	37. 25	6. 56	·1391					
5. 44	36. 45	7. 11	·1389					
6. 3	36. 45	7. 39	·1388					
6. 11	37. 5	7. 50	·1382					
6. 37	36. 0	8. 6	·1382					
6. 41	36. 25	8. 41	·1367					
6. 58	36. 25	9. 22	·1378					
7. 23	34. 30	9. 40	·1373					
7. 59	33. 10	10. 13	·1379					
8. 11	31. 0	10. 23	·1375					
8. 16	31. 0	11. 17	·1387					
8. 38	28. 50	11. 34	·1385					
9. 8	30. 0	12. 14	·1386					
9. 12	28. 55	14. 25	·1387					
9. 23	29. 45	14. 41	·1388					
9. 37	29. 25	14. 59	·1390					
9. 56	27. 20	17. 14	·1392					
10. 11	27. 55	17. 40	·1386					
10. 18	27. 35	18. 18	·1390					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.26		Sept.26						
h m	° ′ ″	h m		h m		h m	°	°
10. 27	20. 29. 20	18. 54	·1385					
10. 41	30. 20	19. 24	·1383					
11. 17	32. 35	20. 3	·1377					
11. 43	32. 35	21. 37	·1368					
12. 8	33. 0	22. 23	·1369					
13. 11	33. 10	22. 56	·1376					
14. 38	33. 10	23. 12	·1373					
14. 43	32. 30	23. 42	·1374					
15. 58	32. 50	23. 59	·1377					
16. 10	33. 15							
16. 39	32. 45							
17. 12	33. 15							
17. 26	32. 50							
17. 55	34. 25							
18. 8	34. 25							
18. 33	33. 0							
18. 55	33. 0							
19. 43	32. 30							
21. 23	33. 40							
22. 18	36. 25							
22. 58	40. 0							
23. 8	39. 45							
23. 52	41. 20							
23. 59	42. 10							
Sept.27		Sept.27		Sept.27		Sept.27		
0. 0	20. 42. 10	0. 0	·1377	0. 0	·02396	0. 0	62·6	65·0
1. 8	42. 25	0. 39	·1379	0. 43	·02402	1. 0	63·6	66·5
1. 11	40. 50	1. 10	·1382		·02543	2. 0	63·6	66·8
1. 58	39. 30	1. 12	·1387	5. 45	·02596	3. 0	63·9	67·2
4. 13	34. 35	1. 51	·1391	8. 46	·02647	Max.	64·6	67·2
5. 17	33. 35	4. 14	·1388	10. 38	·02601	9. 0	61·8	65·8
6. 41	33. 15	4. 24	·1389	12. 46	·02542	Min.	58·1	61·6
6. 52	32. 50	4. 42	·1387	13. 43	·02527	21. 0	60·6	62·2
8. 11	32. 25	5. 13	·1390	15. 29	·02470	22. 0	61·6	63·6
8. 56	31. 30	5. 30	·1388	18. 16	·02436	23. 0	61·9	63·9
9. 9	31. 40	5. 51	·1391	19. 7	·02435			
9. 13	32. 35	5. 56	·1390		·02420			
9. 24	31. 30	6. 48	·1392	22. 13	·02408			
10. 14	29. 0	8. 11	·1391	23. 59	·02433			
10. 41	26. 25	9. 0	·1386					
11. 27	27. 55	9. 15	·1389					
11. 49	27. 55	9. 50	·1386					
12. 15	25. 45	9. 58	·1387					
12. 42	26. 25	10. 15	·1393					
13. 40	29. 30	10. 44	·1388					
13. 43	29. 5	11. 21	·1390					
13. 56	29. 35	11. 46	·1388					
14. 42	29. 30	12. 18	·1394					
15. 13	29. 30	12. 43	·1387					
15. 55	30. 30	12. 53	·1388					
16. 9	30. 15	13. 12	·1386					
17. 8	30. 25		* * *					
18. 11	29. 20	13. 58	·1391					
18. 52	29. 20	14. 12	·1390					
19. 38	28. 10	14. 52	·1394					
19. 44	28. 45	16. 4	·1395					
20. 34	28. 35	17. 27	·1398					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.27		Sept.27						
h m	° ′ ″	h m		h m		h m	°	°
21. 43	20. 30. 30	19. 23	·1396					
22. 26	32. 40	19. 43	·1397					
22. 42	33. 25	20. 25	·1392					
22. 58	35. 0	20. 44	·1393					
23. 12	35. 25	21. 45	·1385					
23. 37	36. 30	21. 52	·1384					
23. 56	38. 50	22. 24	·1386					
23. 59	38. 35	22. 30	·1383					
		22. 57	·1386					
		23. 16	·1382					
		23. 35	·1383					
		23. 54	·1390					
		23. 59	·1384					
Sept.28		Sept.28		Sept.28		Sept.28		
0. 0	20. 38. 35	0. 0	·1384	0. 0	·02433	0. 0	62·5	64·1
0. 14	37. 50	0. 13	·1380	1. 49	·02454	1. 0	63·0	64·7
0. 28	39. 30	0. 23	·1386	2. 7	·02474	2. 0	63·5	65·0
0. 39	38. 35	0. 29	·1384	2. 12	·02471	3. 0	64·1	65·1
1. 8	40. 10	0. 50	·1389	2. 53	·02493	Max.	64·3	66·4
1. 55	39. 50	0. 56	·1388	3. 10	·02472	9. 0	63·6	64·9
1. 58	42. 30	1. 13	·1385	3. 25	·02498	Min.	60·2	63·4
2. 6	42. 20	1. 52	·1387	3. 34	·02500	21. 0	62·5	65·1
2. 9	42. 40	2. 1	·1402	3. 43	·02513			
2. 14	41. 40	2. 9	·1405	4. 18	·02511			
2. 38	43. 30	2. 17	·1397	4. 19	·02532			
2. 42	43. 20	2. 40	·1401	4. 44	·02516			
2. 50	44. 0	2. 48	·1396	4. 54	·02535			
3. 0	43. 0	2. 55	·1399	5. 25	·02542			
3. 9	41. 30	3. 6	·1394	5. 42	·02578			
3. 12	42. 10	3. 14	·1377	5. 51	·02568			
3. 23	42. 10	3. 22	·1378	6. 7	·02591			
3. 30	40. 15	3. 27	·1392	6. 26	·02587			
3. 42	40. 45	3. 40	·1385	6. 42	·02592			
3. 53	39. 50	3. 49	·1399	6. 45	·02590			
3. 57	41. 40	3. 56	·1398	6. 58	·02604			
4. 6	41. 50	4. 5	·1391	7. 49	·02591			
4. 15	44. 5	4. 11	·1383	9. 26	·02591			
4. 23	45. 25	4. 13	·1396	10. 13	·02583			
4. 28	46. 5	4. 20	·1392	10. 41	·02561			
4. 39	44. 0	4. 38	·1416	10. 57	·02559			
4. 43	44. 30	4. 49	·1381	11. 9	·02549			
5. 6	44. 20	4. 56	·1389	11. 31	·02488			
5. 13	42. 15	5. 34	·1378	12. 9	·02466			
5. 24	42. 50	5. 45	·1395	12. 33	·02489			
5. 39	38. 30	6. 4	·1384	12. 47	·02472			
5. 43	37. 20	6. 14	·1392	13. 49	·02463			
5. 54	37. 35	6. 24	·1390	14. 3	·02476			
6. 8	36. 0	6. 32	·1384	14. 24	·02451			
6. 14	33. 0	6. 40	·1387	14. 33	·02456			
6. 23	33. 0	6. 45	·1366	14. 40	·02439			
6. 27	30. 55	6. 53	·1386	15. 11	·02445			
6. 38	30. 0	7. 0	·1383	15. 51	·02464			
6. 42	30. 15	7. 24	·1400		* * *			
6. 44	32. 40	7. 36	·1399	18. 49	[illegible]			
6. 50	30. 15	7. 44	·1406		* * *			
6. 58	32. 30	7. 52	·1397	20. 23	·02475			
7. 8	33. 50	8. 11	·1396	20. 53	·02463			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Sept.28		Sept.28		Sept.28					Sept.28		Sept.28						
h m	° ′ ″	h m		h m		h m	°		h m	° ′ ″	h m		h m		h m	°	°
7. 12	20. 33. 55	8. 19	·1399	21. 9	·02472				17. 43	20. 26. 50	23. 6	·1384					
7. 38	32. 0	8. 45	·1400	23. 59	·02491				17. 47	28. 10	23. 16	·1373					
7. 46	32. 0	9. 22	·1398						17. 51	28. 50	23. 24	·1376					
8. 11	31. 45	9. 30	·1401						18. 5	27. 10	23. 40	·1374					
8. 33	30. 45	9. 43	·1397						18. 9	28. 40	23. 59	·1380					
8. 44	31. 30	10. 10	·1396						18. 14	26. 10							
9. 10	30. 55	10. 18	·1401						18. 36	32. 0							
9. 14	31. 30	10. 36	·1397						18. 44	30. 25							
9. 25	31. 0	10. 45	·1403						19. 3	32. 30							
9. 39	31. 55	11. 4	·1394						19. 10	31. 20							
9. 52	30. 10	11. 20	·1427						19. 24	34. 0							
10. 11	30. 0	11. 42	·1390						19. 35	32. 35							
10. 21	30. 20	11. 50	·1392							***							
10. 25	29. 10	12. 14	·1372						19. 56	34. 0							
10. 38	25. 40	12. 41	·1380						20. 6	35. 40							
10. 56	29. 30	12. 59	·1384						20. 11	34. 0							
11. 9	25. 45	13. 12	·1399						20. 14	35. 50							
11. 23	32. 30	13. 26	·1393						20. 22	33. 10							
11. 28	34. 0	13. 35	·1394						20. 26	36. 0							
11. 43	25. 40	13. 41	·1396						20. 39	36. 0							
11. 55	24. 30	14. 6	·1374						20. 54	32. 50							
12. 3	22. 30	14. 22	·1398						20. 58	34. 0							
12. 14	18. 35	14. 34	·1395						21. 17	31. 40							
12. 23	18. 0	14. 40	·1403						21. 26	33. 45							
12. 45	24. 0	14. 54	·1395						21. 43	33. 0							
12. 56	25. 35	15. 4	·1397							***							
13. 9	24. 50	15. 12	·1396						22. 9	34. 10							
13. 14	21. 30	15. 19	·1399							***							
13. 35	18. 20	15. 29	·1395						22. 28	35. 50							
13. 53	18. 20	15. 40	·1397						22. 38	34. 15							
14. 4	26. 20	15. 43	·1395						22. 46	36. 40							
14. 13	27. 30	15. 58	·1398						23. 7	39. 50							
14. 25	27. 0	16. 26	·1390						23. 13	37. 15							
14. 28	28. 40	16. 50	·1391						23. 25	37. 50							
14. 39	27. 55	16. 56	·1394						23. 39	37. 10							
14. 45	30. 0	17. 6	·1389						23. 56	38. 15							
14. 54	31. 30	17. 13	·1393						23. 59	38. 10							
15. 0	30. 20	17. 39	·1395														
15. 7	30. 20	17. 45	·1394						Sept.29		Sept.29		Sept.29		Sept.29		
15. 14	28. 20	17. 55	[illegible]						0. 0	20. 38. 10	0. 0	·1380	0. 0	·02491	1. 0	63 ·6	66 ·7
15. 27	26. 30	18. 14	·1394						0. 10	37. 45	0. 13	·1377	4. 18	·02611	3. 0	63 ·7	66 ·8
15. 38	25. 30	18. 22	·1397						0. 38	39. 0	0. 38	·1381	4. 29	·02604	Max.	64 ·2	67 ·2
15. 40	26. 20	18. 32	·1388						0. 41	38. 20	0. 41	·1378	4. 46	·02610	9. 0	63 ·8	67 ·0
15. 43	25. 5	18. 36	·1392						1. 9	38. 20	1. 11	·1382	6. 6	·02581	Min.	60 ·0	63 ·1
15. 55	26. 50	18. 57	·1376						1. 44	37. 45	1. 37	·1379	9. 2	·02594	21. 0	61 ·8	64 ·6
16. 8	27. 55	19. 12	·1374						2. 23	36. 50	1. 43	·1382	12. 41	·02517			
16. 26	27. 30	19. 24	·1366						2. 37	37. 15	1. 59	·1379	13. 57	·02515			
16. 38	28. 0	19. 42	·1369						2. 44	38. 20	2. 40	·1386	15. 31	·02456			
16. 43	28. 50	20. 10	·1371						2. 57	38. 20	2. 46	·1392	15. 57	·02466			
16. 51	29. 30	20. 21	·1366						3. 13	37. 10	2. 55	·1390	18. 32	·02458			
16. 56	27. 20	20. 43	·1371						3. 23	38. 15	3. 0	·1392	19. 53	·02463			
17. 0	29. 5	21. 11	·1365						3. 26	37. 10	3. 18	·1383	20. 52	·02472			
17. 9	28. 20	21. 39	·1367						3. 34	37. 10	3. 24	·1385	22. 24	·02451			
17. 12	29. 5	22. 4	·1380						3. 42	35. 30	3. 36	·1381	23. 33	·02448			
17. 22	28. 0	22. 22	·1379						3. 46	33. 0	3. 44	·1382	23. 59	·02458			
17. 28	29. 10	22. 42	·1382						3. 56	30. 30	3. 52	·1369					
17. 29	28. 0	22. 55	·1389						4. 8	30. 30	4. 8	·1363					
17. 41	29. 0	23. 0	·1384						4. 10	28. 55	4. 11	·1366					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol **:** attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers: Of H. F. Magnet.	Readings of Thermometers: Of V. F. Magnet.
Sept.29		Sept.29						
h m	° ′ ″	h m		h m		h m	°	°
4. 13	20. 27. 30	4. 14	·1358					
4. 24	28. 10	4. 26	·1364					
4. 28	26. 45	4. 32	·1360					
4. 42	28. 10	4. 53	·1386					
4. 56	31. 0	5. 10	·1390					
5. 24	33. 35	5. 28	·1392					
6. 9	33. 5	5. 35	·1391					
6. 26	33. 30	5. 44	·1393					
6. 40	33. 30	5. 50	·1392					
6. 56	32. 30	6. 6	·1395					
7. 31	33. 30	6. 20	·1394					
7. 47	32. 50	6. 30	·1397					
7. 58	33. 10	6. 38	·1395					
8. 20	32. 10	6. 46	·1398					
8. 31	32. 50	7. 7	·1392					
8. 39	32. 10		***					
8. 42	30. 50	8. 9	·1395					
8. 57	30. 50	8. 26	·1392					
9. 11	30. 25	8. 35	·1394					
9. 38	31. 30	8. 45	·1390					
9. 53	31. 5	9. 26	·1389					
9. 59	26. 30	9. 40	·1394					
10. 25	28. 50	9. 56	·1392					
10. 43	29. 40	10. 10	·1405					
11. 9	29. 15	10. 44	·1389					
11. 23	30. 50	10. 58	·1391					
11. 26	29. 20	11. 14	·1389					
11. 40	32. 30	11. 26	·1391					
11. 52	32. 30	11. 52	·1393					
11. 57	31. 10	12. 0	·1391					
12. 10	32. 25	12. 17	·1395					
12. 56	30. 0	12. 44	·1392					
13. 53	32. 15	12. 57	·1395					
13. 58	31. 20	13. 14	·1392					
14. 14	32. 50	13. 56	·1396					
14. 44	30. 30	14. 32	·1389					
15. 9	28. 30	14. 50	·1392					
15. 14	29. 25	15. 22	·1387					
15. 25	29. 30	15. 43	·1381					
15. 42	31. 30	16. 18	·1387					
16. 8	32. 5	16. 55	·1388					
16. 39	29. 30	17. 15	·1393					
16. 44	29. 30	17. 25	·1387					
16. 59	28. 10	17. 37	·1389					
17. 13	28. 10	18. 40	·1385					
17. 24	27. 30	18. 45	·1388					
17. 55	30. 0	18. 56	·1384					
18. 10	30. 0	19. 18	·1386					
18. 24	29. 25	19. 34	·1389					
18. 38	29. 25	21. 20	·1383					
18. 43	30. 30	22. 9	·1378					
18. 48	29. 5	23. 5	·1374					
18. 56	29. 50	23. 28	·1376					
19. 9	29. 0	23. 41	·1373					
19. 25	29. 35	23. 59	·1375					
19. 57	28. 40							
20. 38	29. 0							
22. 29	32. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers: Of H. F. Magnet.	Readings of Thermometers: Of V. F. Magnet.
Sept.29								
h m	° ′ ″	h m		h m		h m	°	°
22. 41	20. 33. 20							
23. 9	34. 30							
23. 23	35. 20							
23. 27	36. 50							
23. 41	35. 20							
23. 53	36. 10							
23. 59	36. 0							
Sept.30		Sept.30		Sept.30		Sept.30		
0. 0	20. 36. 0	0. 0	·1375	0. 0	·02458	1. 0	62·8	64·9
0. 37	37. 10	0. 34	·1381	4. 4	·02535	3. 0	63·3	65·7
0. 51	38. 15	0. 56	·1388	7. 6	·02530	Max.	63·5	65·7
0. 56	39. 10	1. 13	·1378	7. 28	·02541	9. 0	61·8	64·7
1. 3	38. 0	2. 13	·1382	8. 54	·02528	Min.	60·5	63·7
1. 41	37. 0	2. 29	·1381	10. 11	·02492	21. 0	62·1	65·0
2. 3	37. 0	2. 48	·1385	10. 57	·02478			
2. 26	35. 30	3. 40	·1384	14. 23	·02442			
2. 38	35. 40	3. 52	·1387	18. 22	·02442			
3. 38	34. 5	4. 6	·1385	19. 46	·02466			
3. 58	33. 30	4. 13	·1388	22. 17	·02457			
4. 6	33. 30	4. 50	·1386	23. 59	·02448			
4. 56	32. 15	5. 51	·1390					
5. 11	32. 15	6. 9	·1390					
5. 41	31. 30	6. 11	·1393					
6. 10	32. 0	6. 34	·1389					
6. 27	32. 0	6. 41	·1393					
6. 37	32. 50	6. 48	·1391					
6. 40	31. 45	7. 13	·1381					
6. 56	31. 45	7. 30	·1392					
7. 13	26. 40	8. 24	·1390					
7. 42	30. 30	8. 37	·1405					
8. 18	31. 25	9. 2	·1392					
8. 28	29. 0	9. 40	·1396					
8. 56	29. 30	9. 52	·1403					
9. 11	31. 0	10. 11	·1397					
9. 26	31. 30	10. 22	·1412					
9. 38	31. 20	10. 55	·1408					
9. 52	32. 5	11. 11	·1395					
10. 6	30. 45	11. 18	·1396					
10. 17	33. 5	11. 39	·1392					
10. 39	29. 35	12. 28	·1396					
10. 54	30. 50	13. 3	·1392					
11. 5	30. 10	13. 49	·1394					
11. 49	30. 45	14. 6	·1392					
11. 58	31. 10	14. 26	·1396					
12. 23	30. 45	14. 55	·1394					
12. 57	31. 5	15. 45	·1396					
13. 9	32. 10	16. 24	·1394					
13. 24	31. 50	17. 41	·1397					
13. 31	33. 30	21. 14	·1382					
13. 43	34. 5	22. 41	·1376					
13. 55	33. 40	23. 59	·1385					
14. 24	33. 5							
14. 44	31. 20							
15. 43	29. 50							
16. 19	30. 35							
16. 42	30. 10							
16. 53	30. 10							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 30								
h m	° ′ ″	h m		h m		h m	°	°
17. 3	20. 30. 0							
19. 23	29. 20							
19. 38	28. 50							
20. 9	28. 45							
20. 28	28. 5							
20. 34	28. 45							
22. 23	32. 30							
23. 13	37. 10							
23. 41	37. 0							
23. 59	39. 10							
Oct. 1		Oct. 1		Oct. 1		Oct. 1		
0. 0	20. 39. 10	0. 0	·1385	0. 0	·02448	0. 0	63 ·1	65 ·5
0. 43	39. 10	0. 4	·1386	4. 16	·02529	Max.	64 ·3	67 ·3
1. 8	38. 10	0. 18	·1380	6. 23	·02536	8. 0	64 ·2	67 ·3
1. 27	38. 50	0. 46	·1382	8. 6	·02572	Min.	59 ·2	62 ·0
2. 7	37. 0	1. 12	·1379	9. 8	·02580	21. 0	61 ·8	64 ·3
2. 27	37. 0	1. 45	·1384	11. 40	·02483			
2. 39	36. 35	2. 9	·1383	12. 27	·02471			
2. 54	36. 35	3. 16	·1388	13. 24	·02442			
3. 6	36. 0	3. 50	·1387	14. 57	·02431			
3. 40	35. 35	4. 10	·1389	17. 23	·02410			
3. 56	35. 30	4. 26	·1386	18. 46	·02392			
4. 22	35. 10	4. 39	·1390	22. 23	·02431			
4. 29	35. 20	4. 52	·1385	23. 59	·02433			
4. 42	37. 0	5. 24	[illegible]					
4. 59	35. 0	5. 42	·1382					
5. 8	34. 30	6. 12	·1387					
5. 52	35. 5	6. 25	·1395					
6. 6	34. 20	6. 52	·1391					
6. 12	32. 30	7. 16	·1399					
6. 23	32. 30	7. 27	·1394					
6. 28	32. 50	7. 53	·1377					
7. 5	30. 15	8. 24	·1389					
7. 26	33. 10	8. 54	·1382					
7. 39	30. 30	9. 12	·1389					
7. 56	24. 30	9. 24	·1386					
8. 28	25. 0	9. 51	·1387					
8. 58	29. 40	9. 57	·1385					
9. 13	29. 20	10. 20	·1395					
9. 30	28. 30	10. 41	·1390					
9. 58	29. 5	11. 0	·1387					
10. 12	29. 5	11. 19	·1391					
10. 26:	28. 0	11. 28	·1389					
10. 56	30. 20	11. 40	·1392					
11. 9	30. 20	12. 4	·1388					
11. 22	28. 35	12. 28	·1396					
12. 53	34. 10	12. 51	·1396					
13. 9	33. 0	13. 10	·1392					
13. 39	28. 0	13. 28	·1386					
13. 56	28. 0	13. 53	·1393					
14. 7	27. 15	14. 20	·1392					
14. 14	27. 15	14. 50	·1390					
15. 3	30. 50	18. 46	·1396					
15. 16	29. 45	20. 11	·1393					
15. 56	30. 30	22. 14	·1380					
16. 40	30. 30	23. 19	·1377					
16. 54	30. 5	23. 59	·1388					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 1								
h m	° ′ ″	h m		h m		h m	°	°
17. 43	20. 30. 5							
18. 26	30. 20							
19. 24	30. 0							
19. 41	29. 30							
20. 54	29. 30							
22. 11	32. 0							
22. 41	34. 10							
22. 56	37. 40							
23. 15	37. 20							
23. 43	38. 10							
23. 59	40. 0							
Oct. 2		Oct. 2		Oct. 2		Oct. 2		
0. 0	20. 40. 0	0. 0	·1388	0. 0	·02433	1. 0	63 ·4	66 ·2
0. 7	40. 35	0. 40	·1385	3. 25	·02491	3. 0	63 ·9	67 ·4
0. 42	39. 0	1. 24	·1389	7. 29	·02532	Max.	64 ·1	67 ·5
0. 53	39. 35	1. 44	·1390	8. 58	·02518	9. 0	62 ·8	64 ·1
1. 41	37. 45	2. 4	·1393	10. 47	·02463	Min.	59 ·6	61 ·1
1. 54	37. 55	2. 15	·1391	16. 14	·02426	21. 0	61 ·7	64 ·0
2. 13	37. 10	3. 19	·1393	18. 24	·02395			
2. 23	37. 10	3. 37	·1390	23. 59	·02448			
2. 57	36. 0	4. 56	·1392					
3. 20	35. 0	5. 11	·1391					
4. 54	33. 0	5. 57	·1396					
5. 56	33. 15	6. 43:	·1391					
6. 9	32. 45	7. 10	·1397					
6. 44	32. 30	7. 32	·1392					
6. 56	33. 25	7. 42	·1393					
7. 9	32. 20	8. 22	·1384					
7. 18	32. 5	8. 41	·1386					
7. 29	33. 0	8. 52	·1383					
7. 54	32. 25	9. 4	·1398					
8. 16	29. 30	9. 22	·1387					
8. 28	29. 30	9. 40	·1398					
8. 38	30. 50	9. 50	·1398					
8. 46	30. 15	10. 3	·1394					
8. 58	36. 40	10. 24	·1393					
9. 26	27. 0	11. 20	·1396					
10. 4	30. 20	12. 34	·1397					
10. 41	31. 40	12. 52	·1395					
11. 15	32. 5	13. 14	·1397					
11. 34	31. 0	13. 41	·1396					
11. 59	32. 5	14. 10	·1399					
13. 39	31. 40	14. 52	·1397					
14. 9	31. 50	15. 26	·1398					
14. 53	30. 50	15. 40	·1395					
15. 23	31. 10	15. 56	·1397					
15. 27	32. 15	16. 13	·1394					
15. 43	31. 30	16. 41	·1399					
15. 56	33. 50	16. 57	·1398					
16. 9	32. 40	17. 42	·1399					
16. 23	32. 40	18. 26	·1397					
16. 56	30. 50	19. 16	·1398					
17. 24	30. 15	19. 55	·1387					
17. 30	30. 25	21. 10	·1384					
17. 51	30. 15	21. 41	·1377					
17. 58	30. 25	22. 18	·1388					
18. 25	29. 50	22. 48	·1376					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 2		Oct. 2						
h m	° ′ ″	h m		h m		h m	°	°
18. 58	20. 29. 20	23. 42	·1380					
19. 10	29. 20	23. 59	·1384					
20. 17	28. 50							
20. 38	29. 40							
20. 44	29. 40							
21. 24	31. 30							
21. 29	31. 30							
22. 0	33. 10							
22. 54	35. 0							
23. 11	36. 40							
23. 22	36. 40							
23. 56	38. 15							
23. 59	38. 50							
Oct. 3		Oct. 3		Oct. 3		Oct. 3		
0. 0	20. 38. 50	0. 0	·1384	0. 0	·02448	1. 0	64·1	66·5
1. 11	37. 50	0. 20	·1383	4. 23	·02527	3. 0	64·1	67·1
1. 19	37. 5	1. 2	·1385	5. 40	·02520	Max.	64·5	67·2
1. 52	37. 5	1. 21	·1384	9. 14	·02555	9. 0	65·8	64·1
2. 14	36. 50	1. 54	·1389	11. 13	·02472	Min.	55·5	59·0
2. 37	36. 0	2. 12	·1390	13. 31	·02423	21. 0	59·5	62·0
2. 44	36. 0	2. 40	·1388	17. 24	·02304	22. 0	59·6	62·2
2. 58	35. 0	3. 41	·1390	18. 2	·02271	23. 0	59·8	62·5
3. 37	33. 30	4. 10	·1393	23. 59	·02311			
3. 44	33. 30	4. 41	·1386					
4. 38	33. 5	5. 20	·1390					
5. 9	32. 40	5. 49	·1393					
5. 39	33. 0	6. 25	·1392					
5. 57	32. 20	6. 41	·1393					
6. 44	32. 30	6. 54	·1390					
6. 56	32. 5	7. 40	·1393					
7. 23	32. 30	8. 58	·1392					
7. 40	32. 5	9. 14	·1390					
8. 11	32. 30	10. 21	·1395					
8. 29	32. 20	10. 53	·1396					
9. 28	32. 0	11. 13	·1393					
9. 51	31. 30	11. 39	·1396					
11. 4	30. 25	11. 44	·1395					
11. 23	30. 55	12. 0	·1398					
11. 34	30. 30	12. 41	·1394					
11. 43	30. 50	13. 52	·1396					
12. 11	30. 20	14. 6	·1398					
13. 28	30. 30	14. 13	·1396					
13. 56	30. 50	14. 27	·1398					
14. 9	30. 15	15. 21	·1401					
14. 17	30. 50	16. 4	·1399					
14. 37	30. 15	16. 11	·1393					
14. 39	30. 50	16. 22	·1396					
14. 44	30. 15	16. 31	·1394					
14. 57	30. 10	17. 15	·1405					
15. 6	29. 30	17. 49	·1404					
15. 12	30. 10	18. 6	·1396					
15. 26	29. 50	18. 15	·1393					
15. 56	29. 50	18. 37	·1396					
15. 59	31. 40	18. 42	·1393					
16. 11	31. 20		***					
16. 30	32. 40	19. 5	·1398					
17. 0	32. 40	19. 20	·1401					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 3		Oct. 3						
h m	° ′ ″	h m		h m		h m	°	°
17. 12	20. 30. 30	19. 40	·1399					
17. 24	29. 40	19. 51	·1396					
17. 41	29. 30		***					
17. 52	28. 45	20. 40	·1388					
18. 11	29. 30	21. 24	·1383					
18. 23	29. 10	21. 37	·1379					
18. 34	30. 30	21. 54	·1381					
18. 39	29. 45	22. 19	·1378					
18. 52	30. 0	22. 36	·1384					
19. 24	29. 40	22. 41	·1382					
19. 38	29. 40	23. 10	·1389					
19. 50	28. 10	23. 30	·1386					
20. 9	28. 45	23. 45	·1390					
	***	23. 59	·1388					
20. 39	28. 20							
20. 59	29. 10							
21. 12	29. 10							
21. 27	30. 50							
21. 37	29. 30							
22. 11	32. 0							
22. 26	32. 25							
22. 39	33. 30							
22. 56	33. 10							
23. 13	35. 30							
23. 23	35. 0							
23. 27	35. 20							
23. 39	34. 55							
23. 56	36. 15							
23. 59	36. 15							
Oct. 4		Oct. 4		Oct. 4		Oct. 4		
0. 0	20. 36. 15	0. 0	·1388	0. 0	·02311	0. 0	60·6	63·1
0. 11	36. 5	0. 12	·1387	4. 16	·02388	1. 0	61·1	63·8
0. 25	36. 20	0. 21	·1390	9. 41	·02446	2. 0	61·6	64·0
0. 39	36. 0	0. 27	·1389	10. 55	·02410	3. 0	63·0	64·5
1. 56	36. 0	0. 45	·1393	13. 34	·02363	Max.	63·0	65·5
2. 18	35. 0	0. 49	·1390	14. 6	·02344	9. 0	62·5	65·5
2. 56	34. 30	0. 56	·1397	16. 10	·02295	Min.	57·2	59·3
3. 14	34. 30	0. 59	·1394	18. 2	·02216	21. 0	59·4	61·3
3. 27	33. 50	1. 52	·1397	18. 18	·02221	22. 0	59·9	61·6
3. 44	34. 5	2. 22	·1396	19. 18	·02171	23. 0	60·2	62·8
4. 33	33. 0	2. 40	·1397	22. 34	·02227			
4. 52	32. 40	2. 49	·1399	23. 59	·02302			
5. 12	32. 55	3. 18	·1398					
5. 41	31. 50	3. 28	·1405					
6. 6	33. 5	3. 41	·1403					
6. 26	33. 5	4. 12	·1404					
6. 59	32. 0	4. 44	·1399					
7. 30	31. 5	5. 11	·1397					
7. 49	30. 0	5. 40	·1398					
8. 6	28. 10	6. 0	·1396					
8. 26	28. 50	6. 36	·1400					
9. 16	31. 30	7. 42	·1408					
9. 57	31. 30	7. 59	·1399					
10. 46	31. 55	8. 15	·1402					
11. 11	31. 30	8. 29	·1401					
11. 59	32. 5	8. 41	·1403					
12. 14	31. 0	8. 50	·1402					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 4		Oct. 4						
h m	° ′ ″	h m		h m		h m	°	°
13.23	20. 31. 0	8.57	·1406					
13.30	31. 55	9.23	·1404					
13.42	31. 40	9.30	·1409					
13.59	28. 45	9.55	·1407					
14.26	29. 55	10.40	·1406					
14.38	28. 10	11.14	·1402					
14.53	27. 50	12.19	·1408					
15. 0	25. 30	12.37	·1404					
15. 6	26. 45	12.43	·1406					
15.13	26. 35	13. 4	·1405					
15.41	27. 50	13.29	·1406					
15.56	30. 20	13.42	·1411					
16. 8	30. 20	14.12	·1409					
16.23	30. 0	14.22	·1408					
16.39	27. 0	14.50	·1414					
16.54	28. 50	15.11	·1409					
17. 6	30. 20	15.24	·1411					
17.14	33. 0	15.43	·1406					
17.23	33. 0	16. 8:	·1417					
17.29	34. 50	16.41	·1421					
17.37	35. 0	16.59	·1416					
17.42	37. 0	17.20	·1414					
17.53	37. 0	17.40	·1399					
18.12	47. 0	18. 8	·1365					
18.24	53. 50	18.41	·1406					
18.30	53. 30	18.50	·1413					
18.44	50. 50	19.25	·1407					
18.53	50. 50	19.37	·1408					
18.57	49. 40	20. 4	·1383					
19. 9	49. 40	20.12	·1396					
19.26	44. 10	20.25	·1386					
19.44	43. 0	20.34	·1394					
19.59	34. 5	21. 0	·1383					
20. 4	35. 50	21.12	·1388					
20.12	32. 30	21.35	·1376					
20.20	28. 20	21.44	·1368					
20.29	31. 30	21.53	·1356					
20.39	34. 0	21.57	·1359					
20.44	34. 0	22. 5	·1356					
20.55	35. 10	22.20	·1365					
21. 6	34. 40	22.35	·1354					
21.28	34. 10	22.40	·1347					
21.56	37. 0	22.47	·1347					
21.58	38. 50	22.54	·1357					
22. 6	37. 15	23. 4	·1347					
22.12	37. 5	23.12	·1343					
22.16	40. 10	23.20	·1347					
22.26	40. 10	23.24	·1345					
22.41	42. 40	23.35	·1358					
22.48	42. 20	23.41	·1355					
22.54	42. 40	23.59	·1367					
22.59	45. 35							
23.11	43. 30							
23.23	43. 30							
23.26	42. 40							
23.29	43. 10							
23.59	49. 5							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 5		Oct. 5		Oct. 5		Oct. 5		
h m	° ′ ″	h m		h m		h m		
0. 0	20. 49. 5	0. 0	·1367	0. 0	·02302	0. 0	60·6	62·4
0.14	39. 10	0.15	·1376	1.49	·02242	1. 0	61·3	62·8
0.27	42. 20	0.30	·1369	2.18	·02293	2. 0	61·1	63·0
0.56	41. 40	0.42	·1368	2.25	·02281	3. 0	61·9	63·8
1. 9	43. 10	0.52	·1370	2.34	·02292	Max.	61·9	64·1
1.26	40. 35	1. 9	·1384	2.54	·02276	9. 0	60·6	62·9
1.44	46. 50	1.13	·1375	3.41	·02286	Min.	57·0	60·5
1.55	45. 20	1.25	·1369	4.25	·02331	21. 0	59·6	61·5
2. 3	39. 15	1.38	·1376	4.36	·02382			
2. 9	38. 40	1.43	·1365	4.40	·02366			
2.25	40. 40	1.56	·1356	4.44	·02373			
2.30	39. 15	2. 9	·1368	5. 1	·02338			
2.42	43. 0	2.13	·1368	5. 9	·02349			
2.56	40. 20	2.25	·1383	5.31	·02314			
3. 6	40. 20	2.30	·1372	5.50	·02337			
3.23	41. 40	2.42	·1379	6.24	·02341			
3.37	40. 50	2.52	·1360	6.36	·02378			
3.40	40. 5	3.11	·1373	6.45	·02347			
3.43	40. 5	3.37	·1379	7.24	·02298			
3.57	41. 45	3.43	·1373	8.16	·02291			
4.23	42. 10	3.56	·1383	8.36	·02267			
4.28	27. 0	4.12	·1384	9. 1	·02282			
4.39	20. 20	4.15	·1379	9.53	·02169			
4.43	28. 0	4.20	·1379	10. 9	·02102			
4.56	30. 40	4.27	·1355	10.18	·02112			
4.58	20. 10	4.41	·1375	10.24	·02062			
5.17	33. 0	4.45	·1395		(†)			
5.28	35. 0	4.56	·1382	10.55	·02062			
5.42	22. 45	5. 3	·1361	11. 8:	·02113			
5.53	25. 30	5.12	·1392	11.19	·02096			
5.58	25. 30	5.19	·1398	12.13	·02148			
6.14	31. 10	5.29	1375	13. 3	·02156			
6.18	29. 25	5.40	·1359	13.59	·02149			
6.26	30. 50	5.52	·1382	14.27	·02135			
6.30	15. 0	6. 0	·1376	14.51	·02108			
6.39	21. 0	6.11	·1368	15.13	·02111			
6.43	12. 0	6.14	·1357	15.39	·02079			
6.48	8. 10	6.22	·1359	15.55	·02090			
6.56	14. 30	6.29	·1346	16.11	·02081			
7.10	26. 30	6.41	·1374	16.26	·02102			
7.14	27. 15	6.44	·1364	17.56	·02117			
7.23	26. 30	6.55	·1401	18.31	·02071			
7.30	27. 15	7.11	·1412	19. 2	·02089			
7.42	27. 30	7.19	·1392	19.34	·02108			
7.49	20. 50	7.26	·1383	19.54	·02136			
7.53	20. 20	7.36	·1384	20.25	·02149			
7.59	20. 45	7.46	·1371	21.10	·02167			
8. 7	18. 40	7.55	·1379	22.23	·02182			
8.12	18. 40	8. 6	·1379	23. 2	·02198			
8.29	15. 0	8.12	·1375	23.34	·02239			
8.55	21. 0	8.25	·1382	23.59	·02248			
9.23	22. 30	8.33	·1372					
9.27	20. 0	8.34	·1374					
9.29	23. 0	8.41	·1363					
9.39	23. 0	8.49	·1364					
9.44	11. 0	9. 0	·1353					
9.58	15. 30	9.14	·1350					
10. 9	15. 0	9.20	·1345					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 5		Oct. 5						
h m	° ′ ″	h m		h m		h m	°	°
10. 23	20. 25. 30	9. 36	·1350					
10. 37	28. 0	9. 43	·1334					
10. 43	3. 10	10. 12	·1367					
11. 2	28. 0	10. 26	·1389					
11. 13	31. 50	10. 39	·1327					
11. 25	29. 10	10. 45	·1320					
11. 28	29. 10	10. 59	·1412					
11. 30	27. 45	11. 11	·1418					
11. 38	28. 50	11. 19	·1402					
11. 43	27. 45	11. 29	·1375					
12. 10	22. 10	11. 41	·1370					
12. 20	26. 50	11. 54	·1367					
12. 29	28. 45	12. 11	·1369					
13. 5	32. 20	12. 20	·1379					
13. 11	34. 30	12. 31	·1376					
13. 14	34. 30	12. 44	·1373					
13. 28	37. 50	12. 56	·1376					
13. 43	35. 20	13. 11	·1378					
13. 59	35. 20	13. 24	·1377					
14. 11	34. 40	13. 30	·1374					
14. 26	37. 30	13. 42	·1377					
14. 40	39. 35	13. 51	·1375					
14. 56	36. 30	14. 6	·1380					
15. 11	36. 50	14. 21	·1381					
15. 35	36. 30	14. 41	·1390					
15. 53	38. 30	14. 52	·1393					
15. 57	36. 0	15. 19	·1382					
16. 8	36. 0	15. 46	·1372					
16. 11	30. 50	15. 54	·1375					
16. 22	32. 45	16. 1	·1382					
16. 25	31. 10	16. 13	·1377					
16. 28	32. 50	16. 24	·1361					
16. 38	34. 40	16. 26	·1373					
16. 42	34. 40	16. 28	·1372					
16. 44	35. 50	16. 35	·1379					
16. 51	34. 50	17. 12	·1376					
16. 58	36. 50	17. 24	·1382					
17. 7	35. 50	17. 56	·1367					
17. 10	36. 50	18. 14	·1379					
17. 12	36. 10	18. 18	·1377					
17. 23	38. 0	18. 40	·1373					
17. 38	40. 0	18. 44	·1366					
18. 10	57. 40	19. 12	·1370					
18. 30	55. 50	19. 18	·1375					
18. 38	52. 20	19. 23	·1371					
18. 43	53. 20	19. 26	·1374					
18. 55	52. 20	19. 40	·1364					
18. 58	51. 40	19. 53	·1373					
19. 9	47. 50	20. 13	·1363					
19. 11	48. 45	20. 16	·1366					
19. 16	46. 0	20. 28	·1366					
19. 23	46. 0	20. 41	·1357					
19. 26	42. 0	20. 57	·1366					
19. 27	43. 40	21. 25	·1351					
19. 36	37. 20	21. 35	·1354					
19. 46	40. 30	21. 57	·1358					
20. 5	40. 30	22. 5	·1353					
20. 10	42. 15	22. 26	·1358					
Oct. 5		Oct. 5						
h m	° ′ ″	h m		h m		h m	°	°
20. 13	20. 40. 30	22. 42	·1349					
20. 23	40. 0	22. 53	·1350					
20. 28	37. 20	23. 0	·1345					
20. 43	37. 5	23. 11	·1349					
20. 54	39. 40	23. 19	·1344					
21. 10	39. 30	23. 27	·1351					
21. 24	37. 0	23. 36	·1340					
21. 39	37. 10	23. 42	·1358					
21. 43	35. 20	23. 48	·1361					
22. 9	40. 5	23. 59	·1367					
22. 26	39. 0							
22. 28	40. 0							
22. 41	39. 0							
22. 56	40. 30							
23. 5	39. 10							
23. 25	38. 40							
23. 27	38. 55							
23. 30	38. 0							
23. 40	36. 0							
23. 56	37. 20							
23. 59	38. 30							
Oct. 6		Oct. 6		Oct. 6		Oct. 6		
0. 0	20. 38. 30	0. 0	·1367	0. 0	·02248	1. 0	61·1	63·0
0. 5	38. 30	0. 3	·1368		***	3. 0	61·3	63·0
0. 9	41. 50	0. 14	·1365	0. 29	·02250	Max.	61·6	63·5
0. 13	38. 10	0. 26	·1384	1. 14	·02254	9. 0	58·7	60·6
0. 23	42. 0	0. 30	·1372		(†)	Min.	55·4	58·1
0. 26	45. 5	0. 33	·1376	1. 36	·02932	21. 0	58·7	60·0
0. 30	43. 5	0. 39	·1368	2. 14	·02941			
1. 8	44. 35	0. 47	·1357	3. 25	·02948			
1. 26	39. 10	0. 51	·1360	4. 21	·02977			
1. 39	39. 10	0. 56	·1365	4. 34	·03013			
2. 9	42. 20	1. 10	·1359	4. 46	·03013			
2. 23	40. 40	1. 32	·1374	5. 11	·02972			
2. 41	41. 20	1. 53	·1377	6. 27	·02938			
2. 59	39. 40	2. 16	·1366	7. 3	·02942			
3. 9	38. 30	2. 29	·1374	7. 56	·02944			
3. 21	38. 30	2. 41	·1367	8. 11	·02908			
3. 25	38. 5		***	8. 22	·02889			
3. 28	39. 0	2. 55	·1368	8. 42	·02871			
3. 41	38. 20	3. 11	·1375	8. 56	·02856			
3. 56	38. 20	3. 20	·1369	9. 51	·02832			
4. 5	37. 50	3. 44	·1377	10. 23	·02832			
4. 12	37. 30	3. 49	·1374	12. 6	·02791			
4. 26	36. 0	3. 55	·1378	12. 25	·02795			
4. 46	8. 5	4. 11	·1375	13. 19	·02773			
4. 55	7. 50	4. 22	·1361	17. 16	·02713			
5. 9	23. 10	4. 39	·1340	18. 8	·02711			
5. 18	25. 0	4. 56	·1402	19. 46	·02743			
5. 28	28. 20	5. 10	·1416	21. 39	·02756			
5. 41	27. 15	5. 15	·1403	22. 57	·02743			
5. 56	31. 0	5. 21	·1403	23. 59	·02775			
6. 17	33. 5	5. 38	·1384					
6. 36	32. 10	5. 48	·1385					
6. 43	32. 50	6. 4	·1381					
6. 52	33. 35	6. 25	·1389					
7. 11	30. 0	6. 42	·1384					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

October 6, 1h. 15m. VERTICAL FORCE.—The adjustments were altered, so that the readings were increased by 1[illegible]·47, or by 0·006864 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 6		Oct. 6						
h m	° ′ ″	h m		h m		h m	°	°
7. 23	20. 27. 30	7. 7	·1375					
7. 27	27. 50	7. 48	·1380					
7. 38	27. 50	8. 10	·1416					
7. 56	29. 30	8. 16	·1409					
8. 4	28. 20	8. 21	·1413					
8. 11	33. 10	8. 29	·1414					
8. 26	26. 30	8. 57	·1395					
8. 35	27. 20	9. 18	·1412					
8. 54	38. 10	9. 44	·1381					
9. 10	26. 50	10. 2	·1377					
9. 24	30. 0	10. 12	·1383					
9. 39:	33. 35	10. 19	·1380					
9. 56	29. 0	10. 29	·1383					
10. 7	28. 0	10. 51	·1396					
10. 13	26. 15	11. 6	·1406					
10. 24	27. 0	11. 27	·1384					
10. 28	26. 25	11. 42	·1381					
10. 41	21. 0	11. 56	·1387					
10. 53	21. 55	12. 6	·1385					
10. 57	20. 25	12. 20	·1391					
11. 12	23. 30	12. 24	·1388					
11. 28	30. 25	12. 38	·1392					
11. 47	34. 30	12. 54	·1396					
11. 56	34. 20	13. 22	·1387					
12. 14	31. 15	13. 33	·1390					
12. 32	31. 15	13. 45	·1385					
13. 12	28. 0	14. 14	·1387					
13. 25	26. 20	14. 26	·1395					
13. 28	27. 25	14. 41	·1391					
14. 9	32. 20	16. 19	·1393					
14. 25	31. 15	16. 36	·1392					
14. 38	31. 55	16. 44	·1399					
14. 44	31. 25	16. 55	·1395					
15. 6	31. 10	17. 16	·1397					
15. 23	31. 45	17. 53	·1394					
15. 40	30. 40	18. 6	·1399					
15. 51	30. 25	18. 16	·1394					
16. 23	32. 20	18. 35	·1392					
16. 39	31. 40	18. 44	·1393					
16. 51	33. 10	19. 3	·1390					
17. 6	32. 0	19. 29	·1386					
17. 24	32. 40	19. 42	·1381					
17. 31	32. 20	19. 57	·1379					
18. 26	32. 20	20. 9	·1382					
18. 36	31. 50	20. 42	·1373					
19. 11	34. 25	21. 12	·1374					
19. 27	37. 10	21. 42	·1379					
19. 38	37. 10	21. 51	·1377					
19. 43	38. 5	22. 11	·1384					
20. 23	37. 0	22. 35	·1380					
20. 41	35. 20	22. 42	·1382					
20. 58	36. 25	23. 3	·1369					
21. 12	35. 20	23. 6	·1371					
21. 40	35. 20	23. 12	·1369					
21. 54	35. 50	23. 38	·1380					
22. 3	36. 50	23. 50	·1384					
22. 9	36. 50	23. 59	·1385					
22. 38	39. 55							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 6								
h m	° ′ ″	h m		h m		h m	°	°
22. 59	20. 39. 45							
23. 9	38. 30							
23. 13	38. 10							
23. 24	37. 0							
23. 39	38. 25							
23. 43	38. 25							
23. 59	40. 10							
Oct. 7		Oct. 7		Oct. 7		Oct. 7		
0. 0	20. 40. 10	0. 0	·1385	0. 0	·02775	1. 0	60·1	61·9
0. 8	40. 40	0. 14	·1383	1. 4	·02788	3. 0	60·6	62·8
0. 26	39. 10	0. 26	·1386	2. 23	·02846	Max.	60·8	63·0
0. 53	40. 30	0. 53	·1388	4. 6	·02877	9. 0	60·3	62·7
1. 22	39. 15	0. 56	·1385	4. 30	·02872	Min.	57·6	60·4
1. 28	40. 10	1. 11	·1386	4. 59	·02889	22. 0	59·6	61·6
1. 41	39. 55	1. 16	·1377	6. 18	·02875			
1. 58	41. 20	1. 52	·1387	7. 59	·02878			
2. 24	39. 35	2. 11	·1371	9. 48	·02866			
2. 57	37. 30	2. 25	·1377	10. 4	·02851			
3. 14	37. 40	2. 37	·1372	10. 19	·02846			
3. 29	38. 15	3. 5	·1382	10. 40	·02811			
3. 39	35. 50	3. 26	·1383	11. 18	·02803			
3. 43	35. 35	3. 39	·1376	11. 41	·02789			
3. 53	34. 30	4. 13	·1390	13. 59	·02751			
4. 9	33. 20	4. 34	·1382	14. 36	·02744			
4. 16	34. 10	4. 43	·1387	17. 34	·02773			
4. 26	33. 10	4. 48	·1385	19. 26	·02801			
4. 40	27. 0	4. 58	·1386	19. 53	·02814			
4. 44	26. 40	5. 12	·1382	22. 36	·02794			
4. 53	25. 0	5. 19	·1387	23. 59	·02816			
4. 56	25. 45	5. 26	·1385					
4. 59	24. 40	5. 43	·1387					
5. 8	25. 0	6. 7	·1392					
5. 14	23. 0	6. 20	·1381					
5. 24	25. 30	6. 42	·1382					
5. 43	27. 20	6. 52	·1378					
5. 51:	27. 35	7. 11	·1383					
6. 15	33. 0	7. 20	·1382					
6. 26	31. 50	7. 30	·1387					
6. 37	32. 5	7. 42	·1385					
6. 43	33. 0	8. 11	·1386					
6. 55	33. 30	8. 44	·1388					
7. 10	32. 30	8. 55	·1387					
7. 28	32. 15	9. 39	·1397					
7. 56	33. 40	9. 49	·1412					
9. 10	33. 40	10. 10	·1387					
9. 14	33. 0	10. 24	·1420					
9. 23	31. 55	10. 40	·1406					
9. 32	31. 55	10. 58	·1387					
9. 40	29. 10	11. 19	·1394					
9. 53	32. 0	11. 44	·1382					
10. 7	32. 50	12. 2	·1388					
10. 12	29. 40	12. 12	·1394					
10. 28	32. 0	12. 22	·1393					
10. 42	28. 0	12. 53	·1381					
10. 55	28. 45	13. 0	·1386					
10. 58	28. 10	13. 11	·1382					
11. 10	29. 30	13. 27	·1388					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol ** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.	Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 7		Oct. 7							Oct. 8		Oct. 8		Oct. 8		Oct. 8		
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
11. 13	20. 29. 50	13. 42	·1393						0. 22	20. 40. 50	0. 19	·1388	2. 53	·02876	9. 0	61·7	64·0
11. 26	31. 30	14. 11	·1396						0. 36	41. 30	0. 41	·1393	3. 57	·02917	21. 0	62·0	64·0
11. 41	30. 20	14. 42	·1386						0. 42	41. 45	0. 50	·1390	4. 12	·02914	Max.	62·4	64·3
11. 53	30. 55	14. 52	·1387						0. 51	40. 55	1. 11	·1385	4. 41	·02935			
12. 8	30. 35	15. 0	·1383						0. 55	40. 55	1. 27	·1393	6. 4	·02917			
12. 11	31. 20	15. 20	·1388						1. 7	39. 50	1. 52	·1392	8. 36	·02936			
12. 17	30. 40	15. 27	·1387						1. 40	39. 50	2. 9	·1396	10. 7	·02933			
12. 51	32. 45	15. 43	·1389						1. 53	39. 25	2. 29	·1390	10. 19	·02937			
13. 7	31. 30	15. 56	·1387						2. 9	40. 10	2. 54	·1389	10. 53	·02924			
13. 11	35. 30	16. 26	·1391						2. 14	39. 20	3. 22	·1396	12. 53	·02938			
13. 25	34. 55	16. 54	·1387						2. 43	38. 10	3. 43	·1389	14. 46	·02919			
13. 37	35. 50	17. 24	·1390						2. 56	38. 30	3. 55	·1395	15. 45	·02920			
14. 0	36. 25	17. 35	·1388						3. 16	38. 15	4. 26	·1374	18. 18	·02947			
14. 18	34. 20	17. 52	·1392						3. 23	37. 25	4. 54	·1393	18. 56	·02962			
14. 37	33. 0	18. 13	·1399						3. 28	37. 45	5. 32	·1399	20. 11	·02971			
14. 41	33. 40	18. 41	·1396						3. 43	35. 25	6. 14	·1391	21. 25	·02953			
14. 44	33. 40	19. 0	·1389						3. 55	36. 30	6. 46	·1394	23. 59	·02974			
14. 56	34. 20	19. 30	·1369						4. 3	34. 0	7. 20	·1392					
15. 25	34. 20	19. 54	·1377						4. 11	32. 10	7. 38	·1393					
15. 39	33. 20	20. 0	·1379						4. 17	32. 10	7. 42	·1399					
16. 40	34. 30	20. 24	·1376						4. 31	29. 50	7. 55	·1393					
16. 44	33. 50	20. 50	·1382						4. 40	29. 40	8. 20	·1395					
16. 55	35. 10	21. 40	·1377						4. 58	32. 40	8. 30	·1393					
17. 12	34. 10	21. 44	·1380						5. 26	34. 30	9. 34	·1405					
17. 28	34. 30	22. 10	·1378						5. 42	34. 30	9. 54	·1393					
17. 37	33. 55	22. 24	·1382						6. 6	35. 10	10. 7	·1396					
17. 44	34. 25	22. 50	·1374						6. 37	34. 40	10. 24	·1414					
17. 56	33. 30	22. 55	·1370						6. 41	35. 0	10. 44	·1402					
18. 28	34. 0	23. 11	·1374						6. 56	34. 10	11. 10	·1394					
18. 39	34. 40	23. 16	·1371						7. 6	34. 40	11. 21	·1391					
18. 44	34. 40	23. 41	·1383						7. 32	33. 40	11. 56	·1397					
19. 9	36. 15	23. 59	·1389						7. 55	34. 10	12. 11	·1394					
19. 18	35. 30								8. 9	33. 30	12. 19	·1396					
19. 26	33. 20								8. 37	34. 5	12. 34	·1392					
19. 32	34. 35								8. 41	33. 10	13. 4	·1398					
19. 41	34. 20								8. 47	32. 15	13. 40	·1385					
19. 54	35. 40								9. 0	33. 15	14. 12	·1395					
19. 59	36. 30								9. 27	30. 50	14. 51	·1398					
20. 9	35. 30								9. 55	32. 5	15. 6	·1405					
20. 15	37. 0								10. 2	32. 5	15. 44	·1394					
20. 39	34. 0								10. 11	31. 10	15. 54	·1395					
20. 44	33. 30								10. 27	34. 20	16. 26	·1389					
20. 56	33. 50								10. 53	32. 30	17. 14	·1385					
21. 11	33. 20								11. 36	34. 25	17. 44	·1387					
21. 25	34. 20								12. 3	33. 40	18. 7	·1383					
21. 44	35. 0								12. 12	33. 10	18. 13	·1387					
22. 28	38. 20								12. 28	33. 10	18. 23	·1389					
22. 39	38. 10								12. 55	34. 20	18. 30	·1385					
22. 42	37. 25								13. 6	34. 10	19. 10	·1381					
22. 56	37. 45								13. 11	34. 10	19. 37	·1377					
23. 9	39. 0								13. 14	33. 25	19. 49	·1374					
23. 24	38. 40								14. 7	37. 50	19. 54	·1377					
23. 54	41. 10								14. 24	38. 5	20. 2	·1374					
23. 59	40. 30								14. 35	36. 30	20. 10	·1379					
									14. 44	33. 40	20. 20	·1383					
Oct. 8		Oct. 8		Oct. 8		Oct. 8			14. 55	34. 10	20. 30	·1378					
0. 0	20. 40. 30	0. 0	·1389	0. 0	·02816	Min.	60·3	61·3	15. 6	33. 30	20. 44	·1383					
0. 13	41. 10	0. 12	·1391	2. 9	·02867	1. 0	60·7	62·7	15. 38	32. 10	20. 54	·1381					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 8		Oct. 8						
h m	° ′ ″	h m		h m		h m	°	°
15. 43	20. 31. 30	21. 0	·1383					
15. 53	32. 15	21. 33	·1376					
15. 58	31. 30	21. 58	·1365					
16. 24	33. 40	22. 4	·1365					
16. 39	34. 0	22. 20	·1357					
16. 43	33. 30	22. 49	·1359					
17. 9	33. 35	23. 15	·1363					
17. 37	37. 10		***					
18. 3	35. 30	23. 59	·1372					
18. 9	35. 0							
18. 21	35. 15							
18. 26	34. 30							
18. 43	34. 30							
18. 59	34. 10							
	***							
19. 21	34. 10							
19. 26	33. 30							
19. 44	32. 30							
19. 55	33. 0							
19. 57	31. 40							
20. 10	32. 5							
20. 14	33. 50							
20. 36	31. 40							
20. 39	33. 5							
20. 47	32. 30							
21. 2	33. 20							
21. 9	32. 50							
21. 27	33. 35							
21. 48	33. 50							
21. 56	34. 40							
22. 9	34. 40							
22. 14	34. 50							
22. 38	35. 50							
22. 56	37. 50							
23. 11	38. 15							
23. 18	39. 25							
23. 38	38. 0							
23. 43	39. 5							
23. 59	39. 50							
Oct. 9		Oct. 9		Oct. 9		Oct. 9		
0. 0	20. 39. 50	0. 0	·1372	0. 0	·02974	1. 0	62 ·7	64 ·7
0. 24	40. 0	0. 25	·1371	2. 56	·03018	3. 0	62 ·6	65 ·0
0. 38	40. 50	0. 40	·1375	4. 23	·03049	Max.	63 ·3	65 ·2
0. 43	40. 30	0. 50	·1372	5. 32	·03035	9. 0	62 ·7	64 ·9
0. 56	40. 40	1. 18	·1376	7. 3	·03037	Min.	62 ·0	64 ·0
1. 9	42. 0	1. 21	·1372	7. 24	·03051	21. 0	62 ·6	64 ·1
1. 30	39. 50	1. 41	·1376	7. 46	·03038			
1. 43	40. 35	1. 56	·1382	8. 6	·03044			
1. 55	40. 20	2. 0	·1382	11. 59	·03028			
2. 7	40. 40	2. 18	·1372	12. 25	·03033			
2. 25	40. 0	2. 29	·1374	12. 57	·03002			
2. 39	39. 20	2. 40	·1373	14. 16	·03012			
2. 54	39. 30	2. 54	·1378	14. 56	·02986			
3. 0	38. 0	3. 14	·1370	15. 9	·02978			
3. 16	32. 40	3. 40	·1390	15. 32	·02965			
3. 23	32. 40	3. 49	·1389	17. 3:	·02992			
3. 26	31. 40	3. 52	·1391	18. 53	·02971			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 9		Oct. 9		Oct. 9				
h m	° ′ ″	h m		h m		h m	°	°
3. 36	20. 32. 15	4. 4	·1384	19. 2	·02972			
3. 42	31. 10	4. 12	·1387	20. 31	·02989			
3. 53	33. 0	4. 26	·1385	23. 59	·03002			
3. 57	32. 25	5. 4	·1389					
4. 28	33. 50	5. 20	·1384					
4. 49	34. 0	5. 44	·1386					
5. 11	35. 0	6. 20	·1385					
5. 37	34. 10	7. 6	·1378					
5. 44	33. 20	7. 16	·1393					
6. 3	33. 30	7. 29	·1398					
6. 26	34. 50	7. 50	·1382					
6. 39	34. 30	8. 11	·1387					
6. 53	32. 30	8. 40	·1372					
7. 6	25. 30	8. 54	·1379					
7. 36	29. 30	9. 19	·1383					
7. 43	26. 50	9. 32	·1388					
7. 58	30. 0	9. 43	·1386					
8. 15	32. 0	9. 54	·1387					
8. 29	31. 10	10. 0	·1392					
9. 11	33. 15	10. 15	·1387					
9. 44	32. 50	10. 34	·1386					
9. 58	33. 25	11. 13	·1390					
10. 15	32. 50	11. 54	·1388					
10. 52	33. 20	12. 6	·1390					
11. 12	33. 0	12. 13	·1388					
11. 26	33. 10	12. 15	·1392					
11. 40	32. 20	12. 34	·1399					
11. 54	32. 15	13. 6	·1391					
12. 27	39. 50	13. 50	·1386					
12. 55	33. 45	14. 12	·1384					
13. 9	33. 20	14. 20	·1395					
13. 26	31. 50	14. 37	·1397					
13. 43	31. 30	14. 44	·1399					
14. 9	33. 10	14. 52	·1406					
14. 17	35. 30	14. 57	·1406					
14. 28	37. 50	15. 24	·1415					
14. 51	39. 30	15. 39	·1408					
14. 56	38. 0	15. 45	·1406					
15. 10	38. 0	15. 57	·1395					
15. 35	30. 0	16. 6	·1396					
15. 40	29. 0	16. 20	·1385					
15. 47	29. 0	16. 28	·1390					
15. 56	28. 20	16. 40	·1392					
16. 9	29. 30	16. 52	·1387					
16. 13	29. 20	17. 13	·1397					
16. 24	28. 20	17. 20	·1391					
16. 56	31. 40	17. 30	·1394					
17. 9	32. 0	17. 49	·1384					
17. 12	33. 20	18. 0	·1379					
17. 23	33. 10	18. 19	·1381					
17. 34	34. 50	18. 42	·1396					
18. 4	41. 15	18. 56	·1390					
18. 15	45. 40	19. 7	·1383					
18. 26	45. 0	19. 24	·1387					
18. 39	43. 0	19. 36	·1384					
18. 49	38. 45	19. 43	·1386					
18. 57	38. 0	19. 52	·1380					
19. 6	34. 30	20. 0	·1386					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 9		Oct. 9						
h m	° ′ ″	h m		h m		h m	°	°
19. 12	20. 33. 0	20. 11	·1381					
19. 18	33. 0	20. 14	·1384					
19. 26	32. 20	20. 19	·1383					
19. 42	32. 30	20. 24	·1387					
19. 53	30. 50	20. 27	·1376					
19. 57	32. 40	20. 41	·1384					
20. 8	30. 50	20. 49	·1377					
20. 13	31. 45	20. 58	·1381					
20. 17	30. 40	21. 10	·1376					
20. 25	34. 5		***					
20. 28	31. 40	21. 30	·1374					
20. 41	33. 50	21. 42	·1376					
20. 43	31. 50	21. 53	·1383					
20. 47	33. 5	22. 17	·1367					
21. 0	32. 0	22. 28	·1373					
21. 14	32. 15	22. 57	·1367					
21. 25	33. 50	23. 9	·1375					
21. 28	33. 0	23. 20	·1349					
21. 41	33. 50	23. 40	·1337					
21. 56	37. 25	23. 59	·1342					
22. 9	35. 10							
22. 13	35. 10							
22. 27	37. 50							
22. 57	39. 45							
23. 7	42. 0							
23. 14	39. 20							
23. 41	45. 20							
23. 53	46. 50							
23. 59	44. 30							
Oct. 10		Oct. 10		Oct. 10		Oct. 10		
0. 0	20. 44. 30	0. 0	·1342	0. 0	·03002	1. 0	63 ·2	64 ·9
0. 11	44. 30	0. 9	·1334	1. 9	·03059	3. 0	64 ·2	64 ·5
0. 16	45. 40	0. 20	·1338	2. 34	·03051	Max.	64 ·5	65 ·6
0. 24	48. 0	0. 36	·1357	2. 59	·03083	9. 0	63 ·1	65 ·2
0. 27	49. 15	0. 51	·1344	3. 25	·03109	21. 0	63 ·0	65 ·0
0. 39	49. 50	0. 56	·1352	4. 24	·03084	Min.	62 ·6	64 ·3
0. 42	49. 0	1. 14	·1369	4. 35	·03077	22. 0	62 ·6	64 ·3
0. 49	44. 55	1. 46	·1392	5. 11	·03092	23. 0	62 ·7	64 ·9
1. 8	40. 30	2. 6	·1389	5. 23	·03078			
1. 14	40. 10	2. 24	·1382	5. 39	·03088			
1. 39	42. 40	2. 41	·1363	6. 23	·03067			
1. 45	42. 0	2. 46	·1365	7. 16	·03071			
1. 53	43. 30	2. 50	·1370	7. 31	·03055			
1. 59	42. 50	2. 57	·1371	7. 41	·03063			
2. 13	44. 0	3. 2	·1364	7. 54	·03051			
2. 18	43. 50	3. 13	·1360	8. 8	·03062			
2. 26	44. 10	3. 27	·1373	8. 44	·03030			
2. 39	41. 10	3. 49	·1369	10. 37	·02994			
2. 42	40. 20	4. 12	·1374	11. 45	·03015			
2. 56	40. 45	4. 23	·1380	12. 11	·02991			
3. 6	39. 0	4. 34	·1378	12. 29	·02998			
3. 14	36. 30	4. 50	·1366	12. 49	·02983			
3. 28	39. 45	5. 18	·1389	13. 21	·02990			
3. 47	39. 45	5. 33	·1380	13. 27	·02982			
4. 11	37. 10	5. 51	·1390	14. 7	·02987			
4. 16	36. 25	5. 56	·1386	15. 39	·03023			
4. 26	36. 5	6. 12	·1392	16. 23	·03016			
					***			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 10		Oct. 10		Oct. 10				
h m	° ′ ″	h m		h m		h m	°	°
4. 41	20. 33. 0	6. 27	·1378	20. 16	·03026			
4. 47	30. 0	6. 49	·1382	23. 59	·03043			
5. 4	27. 0	7. 6	·1376					
5. 11	26. 50	7. 14	·1383					
5. 18	29. 40	7. 26	·1387					
5. 26	28. 20	7. 39	·1377					
5. 38	27. 25	7. 43	·1388					
5. 46	31. 10	7. 53	·1394					
5. 55	31. 0	7. 56	·1392					
6. 11	32. 10	8. 14	·1419					
6. 26	30. 20	8. 40	·1402					
6. 39	31. 15	8. 56	·1397					
6. 51	32. 10	9. 10	·1382					
7. 0	30. 55	9. 13	·1385					
7. 23	33. 0	9. 26	·1367					
7. 37	23. 5	9. 40	·1383					
7. 41	23. 5	9. 50	·1397					
7. 56	16. 10	9. 56	·1391					
8. 14	26. 30	10. 9	·1406					
8. 27	26. 50	10. 20	·1410					
8. 51	20. 40	10. 30	·1400					
8. 57	25. 30	10. 40	·1399					
9. 6	26. 10	10. 55	·1377					
9. 14	34. 5	11. 10	·1378					
9. 27	33. 0	11. 25	·1374					
9. 35	33. 0	11. 51	·1387					
9. 49	25. 0	12. 9	·1378					
10. 0	14. 10	12. 12	·1381					
10. 11	17. 20	12. 19	·1375					
10. 25	17. 55	12. 26	·1376					
10. 49	23. 50	12. 40	·1387					
10. 57	23. 40	12. 42	·1385					
11. 10	27. 30	13. 14	·1386					
11. 39	31. 40	13. 25	·1388					
11. 42	31. 40	13. 39	·1381					
11. 54	33. 30	14. 12	·1371					
12. 11	26. 50	15. 9	·1383					
12. 26	31. 30	15. 12	·1381					
12. 38	33. 40	15. 20	·1387					
12. 49	32. 30	15. 29	·1383					
12. 55	33. 30	15. 49	·1386					
13. 11	35. 45	15. 55	·1392					
13. 27	35. 10	16. 12	·1391					
13. 51	36. 30	16. 30	·1394					
14. 13	35. 0	16. 52	·1386					
14. 27	35. 20	17. 19	·1388					
14. 54	33. 40	17. 34	·1385					
14. 57	33. 40	17. 52	·1389					
15. 7	32. 40	18. 15	·1383					
15. 19	33. 40		***					
15. 24	33. 0	18. 57	·1369					
15. 37	34. 20	19. 14	·1374					
15. 40	33. 30	19. 54	·1357					
15. 46	33. 30	20. 4	·1359					
15. 54	34. 35	20. 12	·1355					
16. 4	34. 20	20. 26	·1353					
16. 16	30. 45	20. 43	·1359					
16. 27	30. 45	20. 54	·1348					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 10		Oct. 10						
h m	° ′ ″	h m		h m		h m	°	°
16. 39	20. 33. 0	21. 8	·1355					
16. 41	32. 0	21. 11	·1342					
16. 53	33. 40	21. 19	·1352					
17. 8	33. 0	21. 31	·1347					
17. 28	35. 25	21. 54	·1373					
17. 38	34. 0	21. 57	·1367					
17. 53	35. 10	22. 9	·1371					
18. 1	35. 30	22. 12	·1364					
18. 13	38. 20	22. 16	·1374					
18. 28	40. 5	22. 20	·1360					
18. 53	40. 5	22. 24	·1367					
19. 12	42. 50	22. 34	·1353					
19. 27	41. 15	22. 40	·1366					
19. 38	41. 10	22. 42	·1355					
19. 41	42. 45	23. 0	·1367					
19. 59	40. 0	23. 12	·1365					
20. 11	38. 20	23. 19	·1366					
20. 14	40. 0	23. 28	·1361					
20. 23	40. 0	23. 42	·1357					
20. 27	39. 20	23. 59	·1356					
20. 35	41. 15							
20. 42	41. 30							
20. 46	38. 15							
21. 17	39. 10							
21. 26	38. 0							
21. 34	39. 55							
21. 43	37. 30							
21. 46	33. 55							
21. 54	39. 20							
21. 57	37. 40							
22. 9	38. 10							
22. 12	42. 40							
22. 16	38. 15							
22. 24	40. 0							
22. 42	38. 40							
22. 51	38. 20							
23. 4	41. 10							
23. 28	43. 0							
23. 39	44. 5							
23. 50	43. 30							
23. 55	42. 0							
23. 59	42. 10							
Oct. 11		Oct. 11		Oct. 11		Oct. 11		
0. 0	20. 42. 10	0. 0	·1356	0. 0	·03043	0. 0	63·8	65·0
0. 7	42. 20	0. 9	·1348	4. 1	·03087	1. 0	63·6	65·1
0. 24	39. 35	0. 15	·1341		***	2. 0	63·6	65·2
0. 44	40. 15	0. 35	·1362	5. 33	·03074	3. 0	63·6	65·5
0. 50	40. 15	0. 43	·1357	6. 46	·03065	Max.	63·8	65·7
1. 6	42. 45	0. 51	·1365	7. 3	·03056	9. 0	61·5	64·0
1. 12	42. 45	1. 13	·1366	7. 35	·03067	21. 0	61·8	63·7
1. 23	39. 0	1. 21	·1355	8. 29	·03036	22. 0	59·5	61·4
1. 29	39. 40	1. 38	·1364	8. 59	·03041	Min.	59·5	61·2
1. 39	39. 5	1. 57	·1377	11. 4	·02972	23. 0	59·9	61·2
1. 50	41. 10	2. 33	·1364	11. 23	·02980			
2. 29	39. 50	2. 41	·1374	11. 44	·02974			
2. 41	41. 30	2. 50	·1367	14. 46	·03008			
2. 53	40. 30	2. 57	·1375	17. 11	·02997			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Oct. 11		Oct. 11		Oct. 11				
h m	° ′ ″	h m		h m		h m	°	°
2. 58	20. 40. 30	3. 15	·1368	17. 52	·02982			
3. 29	38. 0	3. 41	·1372	20. 59	·02984			
3. 54	36. 45	3. 52	·1379	22. 51	·02945			
4. 15	36. 0	3. 57	·1377	23. 59	·02947			
	***	4. 14	·1384					
4. 42	35. 30	4. 20	·1383					
4. 51	34. 50	4. 34	·1385					
5. 6	34. 50	4. 41	·1384					
5. 41	29. 10		***					
5. 53	26. 50	5. 9	·1387					
6. 9	26. 50	5. 21	·1382					
6. 16	24. 45	5. 37	·1390					
6. 26	28. 10	5. 54	·1391					
6. 28	27. 20	6. 15	·1397					
6. 39	28. 35	6. 25	·1406					
6. 53	26. 0	6. 30	·1392					
6. 58	20. 40	6. 41	·1393					
7. 8	21. 50	7. 4	·1386					
7. 12	21. 50	7. 12	·1395					
7. 35	30. 0	7. 18	·1392					
7. 56	32. 0	7. 45	·1396					
8. 17	32. 0	8. 12	·1388					
8. 37	31. 0	8. 22	·1390					
8. 59	31. 55	8. 38	·1384					
9. 12	32. 30	9. 14	·1386					
9. 22	32. 30	9. 22	·1388					
9. 40	31. 30	9. 38	·1383					
9. 58	30. 55	9. 45	·1386					
10. 6	27. 10	9. 55	·1384					
10. 21	31. 25	10. 10	·1416					
10. 26	31. 25	10. 23	·1390					
10. 41	36. 0	10. 39	·1408					
11. 7	28. 15	11. 6	·1387					
11. 28	33. 50	11. 13	·1390					
11. 43	32. 20	12. 9	·1385					
11. 56	32. 45	12. 45	·1385					
12. 8	32. 25	12. 55	·1387					
12. 42	32. 50	14. 12	·1386					
12. 54	33. 40	14. 46	·1388					
13. 23	33. 40	16. 44	·1387					
13. 26	33. 0	17. 18	·1396					
13. 38	34. 20	17. 58	·1382					
15. 11	33. 25	18. 12	·1384					
15. 25	33. 25	18. 42	·1394					
15. 38	34. 20	19. 3	·1398					
15. 56	34. 0	19. 18	·1395					
16. 12	35. 5	19. 26	·1387					
16. 23	34. 55	19. 33	·1389					
16. 39	36. 50	19. 44	·1383					
16. 55	36. 45	20. 10	·1385					
17. 37	43. 0	20. 19	·1381					
17. 44	42. 10	20. 39	·1383					
17. 58	42. 45	21. 3	·1377					
18. 11	42. 30	21. 11	·1378					
18. 26	41. 10	21. 23	·1369					
18. 30	41. 5	21. 42	·1363					
18. 56	37. 55	22. 11	·1364					
19. 0	38. 45		***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 11		Oct. 11						
h m	° ′ ″	h m		h m		h m	°	°
19. 6	20. 38. 0	22. 31	·1350					
19. 11	38. 0	22. 50	·1353					
19. 16	38. 40	23. 4	·1346					
19. 23	37. 15	23. 22	·1356					
19. 26	37. 15		***					
19. 28	38. 10	23. 59	·1358					
19. 32	37. 30							
19. 39	37. 30							
19. 43	36. 30							
19. 52	36. 30							
20. 6	35. 15							
20. 10	35. 20							
20. 22	33. 50							
20. 39	33. 25							
20. 56	35. 15							
21. 2	35. 5							
21. 11	36. 0							
21. 42	35. 25							
21. 53	36. 20							
22. 23	36. 20							
23. 6	42. 30							
23. 24	39. 50							
23. 46	42. 0							
23. 57	41. 30							
23. 59	41. 40							
Oct. 12		Oct. 12		Oct. 12		Oct. 12		
0. 0	20. 41. 40	0. 0	·1358	0. 0	·02947	0. 0	60·7	61·8
0. 14	43. 40	0. 4	·1356	3. 3	·03003	1. 0	61·6	63·1
0. 26	43. 10	0. 17	·1364	3. 53	·03054	2. 0	61·8	63·5
0. 30	43. 55	0. 25	·1361	4. 16	·03031	3. 0	62·0	64·0
0. 53	42. 50	0. 41	·1368	4. 31	·03038	Max.	62·4	64·5
1. 0	44. 50	0. 45	·1374	5. 9	·03016	9. 0	58·6	59·2
1. 9	43. 55	1. 19	·1366	6. 33	·03042	Min.	58·5	59·2
1. 23	43. 10	1. 44	·1372	7. 31	·03038	21. 0	59·3	60·5
1. 26	43. 50	1. 53	·1375	7. 53	·03011			
1. 38	43. 30	2. 10	·1371	8. 8	·03028			
1. 44	44. 0	2. 38	·1379	8. 25	·02997			
1. 53	44. 50	2. 52	·1365	9. 10	·02978			
2. 10	40. 20	3. 9	·1345	11. 24	·02913			
2. 23	41. 10	3. 15	·1373	13. 39	·02869			
2. 25	40. 50	3. 43	·1385	14. 9	·02851			
2. 37	42. 5	3. 54	·1381	16. 22	·02777			
2. 39	41. 45	4. 2	·1381	16. 31	·02753			
2. 42	42. 50	4. 15	·1365	16. 59	·02689			
2. 44	42. 0	4. 25	·1366	17. 23	·02734			
3. 0	25. 40	4. 37	·1376	17. 38	·02721			
3. 12	24. 55	4. 49	·1374	19. 24	·02793			
3. 24	26. 0	5. 12	·1365	21. 36	·02808			
3. 25	28. 0	5. 28	·1358	22. 38	·02784			
3. 37	30. 0	5. 44	·1366	23. 59	·02795			
3. 56	37. 30	6. 6	·1367					
4. 2	38. 15	6. 26	·1374					
4. 11	36. 15	6. 44	·1371					
4. 18	34. 50	6. 56	·1366					
4. 31	35. 45	7. 15	·1369					
4. 47	35. 45	7. 30	·1367					
4. 58	34. 0	7. 41	·1369					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 12		Oct. 12						
h m	° ′ ″	h m		h m		h m	°	°
5. 9	20. 34. 30	7. 49	·1367					
5. 25	30. 50	7. 55	·1360					
5. 39	32. 0	8. 14	·1413					
5. 53	31. 15	8. 28	·1393					
6. 9	32. 0	8. 45	·1391					
6. 23	33. 5	9. 10	·1380					
6. 28	35. 0	9. 21	·1378					
6. 34	35. 0	9. 57	·1379					
6. 40	35. 50	10. 35	·1386					
6. 52	32. 0	10. 50	·1396					
6. 56	32. 0	11. 0	·1390					
7. 9	30. 30	11. 10	·1391					
7. 28	30. 0	11. 32	·1384					
7. 41	25. 0	11. 43	·1388					
7. 53	10. 55	11. 56	·1386					
8. 16	28. 15	12. 12	·1389					
8. 24	27. 0	12. 24	·1386					
8. 38	28. 40	12. 39	·1389					
8. 47	32. 0	13. 12	·1384					
9. 9	33. 5	13. 18	·1389					
9. 26	31. 50	13. 31	·1383					
9. 58	31. 20	13. 51	·1388					
10. 52	34. 15	14. 39	·1389					
11. 7	31. 15	14. 55	·1395					
11. 24	29. 30	15. 18	·1397					
11. 30	29. 30	15. 25	·1403					
11. 41	30. 20	15. 35	·1399					
11. 48	30. 20	15. 39	·1401					
12. 11	32. 25	15. 44	·1394					
12. 51	32. 25	16. 1	·1399					
13. 6	32. 0	16. 21	·1407					
13. 28	34. 20	16. 29	·1426					
13. 38	34. 20	16. 39	·1419					
13. 43	36. 15	16. 46	·1424					
13. 56	36. 5	16. 55	·1409					
14. 7	37. 10	17. 11	·1372					
14. 32	34. 10	17. 18	·1378					
14. 43	34. 10	17. 28	·1397					
14. 56	35. 30	17. 44	·1386					
15. 11	33. 0	17. 58	·1385					
15. 24	32. 10	18. 12	·1391					
15. 27	33. 50	18. 30:	·1378					
15. 36	32. 45	18. 54	·1382					
15. 38	34. 50	19. 13	·1381					
15. 43	33. 15	19. 24	·1384					
15. 51	35. 0	19. 44	·1382					
15. 57	36. 10	19. 51	·1383					
16. 6	36. 10	20. 11	·1377					
16. 11	37. 50	20. 16	·1383					
16. 22	35. 10	20. 41	·1378					
16. 27	41. 55	20. 50	·1381					
16. 37	39. 55	21. 10	·1377					
16. 51	49. 0	21. 26	·1382					
17. 6	45. 30	21. 40	·1377					
17. 14	40. 55	21 57	·1375					
17. 31	47. 40	22. 4	·1371					
17. 53	38. 10	22. 24	·1377					
17. 56	30. 0	22. 39	·1367					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 12		Oct. 12						
h m	° ′ ″	h m		h m		h m	°	°
18. 9	20. 35. 10	22. 56	·1377					
18. 23	36. 5	23. 25	·1364					
18. 44	33. 10	23. 43	·1363					
18. 55	34. 5	23. 56	·1356					
19. 10	32. 0	23. 59	·1357					
19. 37	33. 20							
19. 43	32. 40							
20. 5	33. 30							
20. 7	32. 55							
20. 14	33. 40							
20. 58	33. 20							
21. 32	36. 0							
21. 39	36. 0							
21. 55	37. 0							
22. 8	36. 20							
22. 25	39. 30							
22. 39	38. 25							
22. 59	42. 0							
23. 8	40. 5							
23. 21	40. 0							
23. 42	43. 40							
23. 59	42. 45							
Oct. 13		Oct. 13		Oct. 13		Oct. 13		
0. 0	20. 42. 45	0. 0	·1357	0. 0	·02795	1. 0	60·0	61·6
0. 28	45. 0	0. 8	·1364	0. 32	·02818	3. 0	59·6	61·5
0. 57	43. 0	0. 14	·1362	1. 4	·02835	Max.	60·6	62·2
1. 8	43. 55	0. 32	·1375	1. 14	·02832	9. 0	57·0	58·9
1. 11	42. 50	0. 50	·1371	2. 0	·02903	Min.	56·9	58·8
1. 14	43. 45	1. 9	·1373	5. 19	·02868	21. 0	59·6	61·0
1. 22	40. 0	1. 15	·1344	7. 30	·02798			
1. 27	42. 0	1. 27	·1366	9. 57	·02751			
1. 39	42. 10	1. 40	·1376	10. 5	·02746			
1. 41	43. 50	1. 49	·1372	12. 54	·02792			
1. 43	42. 0	2. 13	·1382	16. 39	·02783			
1. 55	38. 20	2. 26	·1375	18. 9	·02772			
1. 58	39. 40	2. 45	·1385	21. 57	·02801			
2. 9	38. 25		***		***			
2. 14	40. 0	3. 15	·1388	23. 59	·02808			
2. 26	38. 30	3. 37	·1386					
2. 38	38. 30	3. 50	·1390					
2. 55	39. 50		***					
3. 14	39. 0	4. 55	·1386					
3. 37	36. 50	5. 6	·1391					
3. 43	36. 50	5. 21	·1387					
4. 23	35. 50	5. 52	·1390					
4. 48	35. 0	6. 40	·1387					
5. 12	33. 45	7. 4	·1392					
5. 29	33. 25	8. 52	·1389					
5. 54	33. 35	9. 13	·1396					
6. 42	30. 50	9. 25	·1394					
7. 11	31. 30	9. 34	·1397					
7. 28	32. 30	9. 42	·1393					
7. 36	31. 50	10. 10	·1394					
7. 42	32. 10	12. 6	·1389					
7. 53	31. 30	12. 44	·1392					
8. 9	30. 55	13. 54	·1391					
8. 28	31. 30	14. 54	·1393					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 13		Oct. 13						
h m	° ′ ″	h m		h m		h m	°	°
9. 6	20. 29. 20	15. 34	·1394					
9. 11	30. 20	16. 12	·1399					
9. 23	30. 5	16. 26	·1403					
10. 30	32. 30	16. 40	·1400					
10. 44	32. 15	17. 15	·1403					
11. 39	33. 20	17. 34	·1405					
12. 7	34. 0	17. 53	·1404					
12. 23	33. 50	18. 22⁚	·1384					
12. 27	34. 15	18. 40	·1386					
12. 56	33. 55	18. 49	·1391					
13. 11	33. 30	19. 20	·1382					
13. 42	34. 30	19. 41	·1385					
14. 26	33. 20	19. 53	·1379					
14. 42	33. 20	19. 56	·1380					
14. 53	33. 50	20. 4	·1375					
15. 3	33. 0	20. 13	·1379					
15. 12	33. 0	20. 24	·1375					
15. 25	32. 30	21. 13	·1356					
15. 42	32. 5	21. 30	·1358					
15. 53	31. 30	21. 43	·1351					
16. 15	32. 0	21. 51	·1353					
16. 26	33. 0	22. 2	·1351					
16. 37	32. 25	22. 14	·1356					
17. 27	36. 15	22. 23	·1352					
17. 41	36. 0	22. 31	·1359					
17. 55	38. 0	22. 41	·1360					
18. 16	42. 0	23. 6	·1373					
18. 28	41. 30	23. 30	·1364					
18. 39	39. 30	23. 45	·1366					
18. 54	39. 30	23. 59	·1349					
19. 0	38. 40							
19. 17	39. 0							
19. 24	40. 0							
19. 27	39. 25							
19. 39	39. 40							
19. 44	38. 45							
19. 56	38. 50							
20. 9	40. 0							
20. 23	38. 0							
	***							
21. 8	34. 30							
21. 13	36. 20							
21. 26	34. 45							
21. 38	35. 30							
21. 53	39. 15							
22. 6	38. 30							
22. 12	40. 35							
22. 26	39. 30							
22. 34	40. 40							
22. 51	38. 50							
22. 57	39. 25							
23. 10	41. 30							
23. 16	41. 40							
23. 39	41. 0							
23. 43	44. 10							
23. 53	44. 10							
23. 59	44. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁚ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Oct. 14		Oct. 14		Oct. 14		Oct. 14			Oct. 14		Oct. 14						
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 44. 30	0. 0	·1349	0. 0	·02808	1. 0	60·6	62·0	7. 24	20. 35. 10	9. 19	·1389					
0. 10	45. 0	0. 9	·1353	2. 38	·02968	3. 0	58·8	61·0	7. 48	34. 0	9. 28	·1381					
0. 22	46. 50	0. 12	·1346	2. 53	·02955	Max.	60·9	62·7	7. 59	35. 0	9. 34	·1384					
0. 26	46. 50	0. 20	·1355	3. 5	·02994	9. 0	57·8	59·6	8. 10	34. 10	9. 40	·1379					
0. 39	47. 40	0. 26	·1354	3. 26	·02979	Min.	57·8	59·6	8. 42	34. 10	9. 44	·1384					
0. 54	46. 30	0. 43	·1367	3. 37	·02998	22. 0	59·5	61·0	8. 57	35. 25	9. 51	·1382					
0. 58	45. 10	0. 52	·1361	3. 57	·02952				9. 13	33. 10	10. 12	·1388					
1. 2	45. 0	1. 3	·1365	4. 14	·02995				9. 29	32. 50	10. 19	·1382					
1. 9	44. 0	1. 8	·1364	4. 18	·02979				10. 8	34. 0	10. 40	·1387					
1. 12	45. 50	1. 13	·1374	4. 39	·03006				10. 12	32. 55	10. 49	·1381					
1. 22	44. 20	1. 23	·1368	4. 55	·02932				10. 37	34. 0	11. 0	·1385					
1. 38	44. 45	1. 41	·1378	4. 59	·02937				10. 54	34. 0	11. 11	·1384					
1. 41	48. 10	1. 52	·1371	5. 6	·02891				11. 24	33. 0	11. 24	·1387					
1. 54	44. 20	2. 4	·1378	5. 26	·02913				11. 33	33. 40	11. 37	·1383					
1. 58	48. 30	2. 19	·1355	5. 30	·02905				12. 43	32. 50	11. 45	·1386					
2. 8	49. 15	2. 28	·1370	5. 34	·02913					***	12. 19	·1384					
2. 23	43. 10	2. 37	·1374	6. 33	·02856				13. 38	33. 40	12. 50	·1387					
2. 26	44. 20	2. 42	·1362	8. 58	·02791				13. 59	33. 5	12. 56	·1383					
2. 29	44. 20	2. 49	·1371	13. 56	·02811					***	13. 4	·1386					
2. 39	47. 50	2. 51	·1368	18. 6	·02806				14. 57	33. 5	13. 30	·1384					
2. 43	42. 30	3. 4	·1380	20. 23	·02791				15. 8	32. 30	13. 50	·1390					
2. 56	44. 0	3. 11	·1353	20. 43	·02791				15. 37	33. 20	13. 55	·1387					
2. 57	46. 0	3. 21	·1369	20. 56	·02783				15. 52	33. 20	14. 6	·1389					
3. 7	49 45	3. 23	·1366	23. 0	·02784				15. 56	32. 50	14. 13	·1387					
3. 10	39. 35	3. 27	·1373	23. 59	·02795				16. 23	32. 40		***					
3. 13	38. 50	3. 37	·1361						16. 42	33. 30	15. 6	·1391					
3. 18	40. 0	3. 44	·1381						16. 53	33. 5	15. 19	·1389					
3. 23	40. 0	3. 53	·1366							***	16. 2	·1390					
3. 28	43. 55	3. 56	·1371						17. 47	34. 30	16. 16	·1389					
3. 39	37. 0	4. 4	·1364						18. 10	36. 20	16. 43	·1392					
3. 46	37. 0	4. 15	·1367						18. 22	36. 20	17. 9	·1388					
3. 56	33. 0	4. 21	·1347						18. 39	35. 25	17. 20	·1390					
4. 3	36. 25	4. 33	·1350						18. 46	35. 20	17. 39	·1389					
4. 10	40. 0	4. 36	·1349						19. 7	36. 15	17. 55	·1390					
4. 13	45. 20	4. 50	·1382						19. 11	36. 5	18. 39	·1398					
4. 17	44. 20	4. 58	·1393						19. 39	36. 30	18. 57	·1397					
4. 23	44. 20	5. 5	·1381							***	19. 55	·1387					
4. 28	33. 0	5. 11	·1409						20. 9	36. 30	20. 20	·1379					
4. 39	24. 10	5. 15	·1348						20. 12	37. 35	20. 25	·1376					
4. 53	29. 55	5. 26	·1363						20. 22	37. 30	20. 44	·1378					
4. 56	28. 40	5. 34	·1361						20. 40	41. 30	20. 54	·1383					
4. 59	31. 0	5. 40	·1369						20. 55	41. 0	21. 14	·1367					
5. 3	27. 0	5. 42	·1354						20. 57	40. 0	21. 39	·1379					
5. 11	44. 0	5. 45	·1357						21. 3	40. 0	21. 59	·1382					
5. 17	29. 5	5. 51	·1348						21. 14	37. 20	22. 14	·1378					
5. 26	31. 20	5. 57	·1337						21. 24	38. 30	22. 20	·1380					
5. 28	29. 0	6. 5	·1341						21. 26	38. 0	22. 43	·1375					
5. 37	31. 10	6. 25	·1359						21. 40	39. 5	22. 52	·1377					
5. 41	31. 20	6. 40	·1364						21. 47	38. 30	23. 11	·1371					
5. 46	35. 20	7. 0	·1367						22. 8	39. 50	23. 34	·1375					
5. 56	35. 20	7. 44	·1379						22. 11	39. 30	23. 54	·1376					
5. 58	32. 20	7. 53	·1377						22. 24	40. 40	23. 59	·1373					
6. 9	33. 0	8. 6	·1387						22. 38	40. 0							
6. 13	32. 30	8. 13	·1383						22. 53	40. 40							
6. 38	35. 35	8. 17	·1383						23. 8	40. 20							
6. 44	34. 50	8. 26	·1379						23. 39	41. 45							
6. 55	35. 15	8. 44	·1381						23. 54	42. 10							
7. 9	34. 50	8. 59	·1397						23. 59	41. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 15		Oct. 15		Oct. 15		Oct. 15		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 41. 30	0. 0	·1373	0. 0	·02795	1. 0	60·4	61·0
0. 23	41. 40	0. 14	·1375	3. 9	·02846	Max.	60·6	62·4
0. 42	40. 0	0. 49	·1378	5. 34	·02842	8. 0	59·3	61·0
1. 28	39. 20	1. 27	·1379	5. 50	·02832	Min.	58·7	60·0
1. 42	39. 0	2. 9	·1384	8. 9	·02821	21. 0	59·0	60·3
1. 56	39. 0	2. 43	·1380	12. 42	·02809			
2. 7	38. 30	3. 11	·1383	12. 59	·02803			
2. 12	38. 30	3. 26	·1378	15. 9	·02781			
2. 43	37. 0	3. 45	·1382	16. 1	·02742			
3. 5	37. 5	4. 26	·1367	16. 20	·02753			
3. 14	36. 5	5. 2	·1374	17. 4:	·02735			
4. 0	34. 55	5. 13	·1379	18. 38	·02755			
4. 21	35. 40	5. 40	·1378	23. 59	·02786			
4. 23	35. 0	5. 52	·1374					
4. 53	34. 0	6. 15	·1378					
5. 6	33. 0	6. 41	·1384					
5. 26	34. 50	7. 58	·1387					
5. 43	32. 45	8. 12	·1399					
5. 53	32. 20	8. 14	·1389					
6. 11	33. 20	8. 40	·1393					
6. 38	33. 20	8. 49	·1388					
6. 41	32. 50	9. 16	·1386					
6. 56	33. 50	9. 39	·1393					
7. 41	33. 30	9. 51	·1385					
8. 7	34. 25	9. 55	·1391					
8. 41	33. 30	10. 28	·1387					
8. 56	32. 30	10. 41	·1394					
9. 16	31. 50	10. 58	·1395					
9. 37	33. 0	11. 42	·1385					
9. 41	32. 0	12. 0	·1387					
9. 48	31. 25	12. 13	·1384					
10. 9	33. 0	12. 41	·1385					
10. 15	32. 25	12. 45	·1388					
10. 28	29. 0	12. 57	·1386					
10. 56	27. 40	13. 13	·1387					
11. 8	28. 0	13. 51	·1384					
11. 27	30. 30	14. 26	·1386					
12. 13	30. 30	14. 41	·1382					
12. 31	32. 50	14. 45	·1384					
12. 39	32. 50	15. 10	·1381					
12. 55	30. 0	15. 25	·1383					
13. 6	28. 15	15. 58	·1377					
14. 11	28. 50	16. 49	·1404					
14. 22	28. 30	17. 15	·1396					
14. 28	30. 0	18. 4	·1384					
14. 42	28. 55	18. 24	·1383					
14. 58	31. 0	18. 42	·1390					
15. 13	34. 10	18. 54	·1389					
15. 41	37. 30	19. 6	·1392					
15. 53	37. 30	19. 42	·1386					
15. 59	34. 30	20. 11	·1380					
16. 11	37. 10	20. 19	·1374					
16. 26	38. 50	20. 40	·1376					
16. 51	36. 0	20. 45	·1378					
17. 17	36. 0	21. 20	·1373					
17. 26	36. 40	21. 27	·1367					
17. 44	35. 30	21. 33	·1367					
18. 10	34. 30	21. 55	·1373					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 15		Oct. 15						
h m	° ′ ″	h m		h m		h m	°	°
18. 43	20. 37. 0	22. 42	·1381					
18. 57	36. 30	22. 54	·1375					
19. 11	37. 20	23. 0	·1378					
19. 39	35. 0	23. 19	·1380					
19. 59	34. 15	23. 29	·1378					
20. 11	35. 0	23. 59	·1381					
20. 14	33. 55							
20. 38	32. 45							
21. 0	34. 10							
21. 37	33. 30							
22. 16	36. 0							
22. 46	38. 40							
22. 56	37. 0							
23. 2	37. 30							
23. 17	38. 5							
23. 28	37. 30							
23. 56	38. 30							
23. 59	38. 20							
Oct. 16		Oct. 16		Oct. 16		Oct. 16		
0. 0	20. 38. 20	0. 0	·1381	0. 0	·02786	1. 0	59·7	61·0
0. 8	38. 5	0. 27	·1388	1. 8	·02807	3. 0	59·9	61·6
0. 51	38. 50	0. 35	·1390	3. 1	·02836	Max.	60·4	62·1
0. 57	39. 5	0. 56	·1393	5. 57:	·02814	9. 0	58·7	60·1
1. 41	37. 20	1. 25	·1388	8. 40	·02809	Min.	58·7	60·0
2. 9	37. 20	1. 41	·1387	9. 49	·02783	21. 0	59·1	62·0
2. 24	36. 40	2. 13	·1392	10. 41	·02779			
2. 54	36. 20	3. 9	·1390	11. 13	·02794			
3. 12	35. 0	3. 25	·1387	11. 29	·02787			
3. 39	34. 40	3. 37	·1388	11. 59	·02800			
3. 57	34. 40	4. 12	·1385	13. 28	·02810			
4. 44	33. 30	5. 59	·1392	13. 31	·02821			
5. 51	32. 50	6. 5	·1390	13. 34	·02806			
5. 56	31. 55	6. 48	·1394	15. 53	·02810			
6. 24	31. 55	7. 25	·1388	18. 24	·02817			
6. 44	31. 20	7. 43	·1386	20. 19	·02814			
7. 37	32. 0	7. 56	·1388	22. 56	·02801			
7. 57	32. 50	8. 25	·1384	23. 59	·02811			
8. 9	32. 0	8. 56	·1390					
8. 21	32. 30	9. 24	·1404					
8. 36	32. 30	10. 0	·1399					
9. 8	28. 30	10. 24	·1395					
9. 35	30. 50	10. 43	·1387					
9. 54	29. 30	10. 54	·1391					
10. 26	33. 45	11. 8	·1387					
10. 32	33. 55	11. 13	·1388					
10. 51	31. 30	11. 40	·1379					
10. 56	33. 0	11. 56	·1387					
11. 6	33. 10	12. 12	·1386					
11. 24	37. 10	12. 27	·1387					
11. 39:	32. 15	13. 4	·1383					
11. 57:	33. 40	13. 38	·1384					
12. 14	32. 0	14. 11	·1383					
12. 45	34. 0	14. 20	·1386					
12. 53	35. 10	14. 51	·1384					
12. 58	34. 30	15. 14	·1387					
13. 11	32. 30	16. 19	·1389					
13. 24	33. 0	17. 27	·1386					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 16		Oct. 16						
h m	° ′ ″	h m		h m		h m	°	°
13. 38	20. 31. 20	18. 14	·1385					
14. 7	32. 40	18. 42	·1388					
14. 23	32. 10	22. 57	·1381					
14. 40	33. 0	23. 59	·1388					
15. 7	32. 30							
15. 43	33. 20							
15. 56	34. 10							
16. 14	33. 30							
16. 40	33. 20							
17. 26	33. 15							
19. 0	32. 20							
20. 6	30. 55							
20. 45	31. 15							
22. 53	36. 5							
23. 26	37. 30							
23. 59	38. 10							
Oct. 17		Oct. 17		Oct. 17		Oct. 17		
0. 0	20. 38. 10	0. 0	·1388	0. 0	·02811	1. 0	60 ·7	62 ·5
0. 14	38. 50	0. 18	·1392	3. 26	·02835	3. 0	61 ·0	62 ·8
1. 26	38. 0	0. 25	·1388	8. 59	·02827	Max.	61 ·0	63 ·9
1. 41	37. 0	0. 56	·1391	9. 39	·02798	9. 0	56 ·8	59 ·0
1. 57	37. 20	1. 25	·1393	12. 16	·02799	Min.	56 ·7	58 ·0
2. 41	36. 0	1. 41	·1390	14. 15	·02786	21. 0	59 ·6	61 ·0
2. 53	36. 0	1. 50	·1393	20. 57	·02778	22. 0	59 ·5	61 ·0
4. 24	34. 0	2. 15	·1388	22. 30	·02762	23. 0	59 ·6	61 ·0
4. 40	34. 30	2. 37	·1387	23. 59	·02772			
4. 52	34. 0	2. 50	·1391					
5. 0	34. 0	3. 43	·1390					
5. 11	34. 30	4. 25	·1387					
5. 40	34. 0	4. 45	·1393					
5. 54	34. 30	4. 57	·1390					
6. 36	35. 0	5. 11	·1387					
9. 11	33. 20	5. 41	·1389					
9. 31	33. 35	5. 51	·1393					
11. 10	33. 20	6. 26	·1392					
11. 36	33. 40	6. 34	·1394					
12. 10	33. 50	6. 57	·1392					
12. 28	35. 0	7. 11	·1394					
12. 56	32. 0	7. 48	·1392					
13. 4	32. 30	8. 6	·1393					
13. 11	32. 5	8. 57	·1389					
13. 38	33. 10	9. 44	·1392					
13. 47	32. 50	11. 9	·1390					
13. 56	32. 50	11. 46	·1392					
14. 11	31. 35	12. 11	·1392					
14. 42	32. 10	12. 36	·1397					
14. 56	31. 50	12. 57	·1394					
15. 10	32. 50	13. 39	·1398					
15. 27	33. 10	13. 49	·1395					
16. 0	34. 25	13. 57	·1396					
16. 23	33. 0	14. 39	·1393					
16. 40	33. 20	14. 50	·1394					
16. 53	32. 10	15. 0	·1390					
17. 11	32. 40	15. 14	·1392					
17. 28	32. 30	15. 36	·1389					
17. 40	33. 5	16. 40	·1395					
17. 43	32. 20	16. 54	·1391					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 17		Oct. 17						
h m	° ′ ″	h m		h m		h m	°	°
17. 55	20. 33. 5	17. 13	·1396					
18. 6	32. 20	17. 26	·1393					
18. 26	32. 0	18. 0	·1394					
18. 56	32. 0	18. 34	·1396					
19. 7	32. 45	18. 52	·1394					
19. 28	32. 45	19. 4	·1395					
19. 43	33. 15	19. 20	·1387					
	***	20. 4	·1385					
20. 16	32. 15	20. 12	·1384					
20. 27	33. 10	20. 20	·1387					
20. 42	32. 30	20. 41	·1384					
20. 46	32. 30	20. 55	·1385					
20. 54	31. 40	21. 30	·1382					
21. 12	33. 30	21. 43	·1384					
21. 26	32. 30	21. 51	·1378					
21. 43	33. 40	21. 56	·1380					
21. 51	33. 40	22. 10	·1377					
22. 35	35. 30	22. 26	·1381					
22. 43	35. 30	22. 41	·1377					
23. 9	37. 30	22 56	·1381					
23. 26	37. 30	23. 40	·1383					
23. 53	38. 30	23. 43	·1381					
23. 59	39. 40	23. 59	·1388					
Oct. 18		Oct. 18		Oct. 18		Oct. 18		
0. 0	20. 39. 40	0. 0	·1388	0. 0	·02772	0. 0	59 ·6	62 ·0
0. 11	39. 50	0. 6	·1385	3. 54	·02843	1. 0	60 ·1	61 ·5
0. 25	39. 20	0. 26	·1383	5. 34	·02842	2. 0	60 ·1	62 ·0
0. 28	40. 50	0. 39	·1385	6. 3	·02851	3. 0	60 ·6	62 ·0
0. 36	40. 10	0. 41	·1382	9. 18	·02817	Max.	60 ·6	62 ·2
0. 41	41. 0	0. 49	·1384	10. 57	·02751	9. 0	59 ·6	62 ·0
0. 58	39. 50	0. 51	·1380	11. 15	·02777	Min.	59 ·1	60 ·0
1. 8	40. 45	0. 56	·1381	11. 40	·02738	21. 0	59 ·0	60 ·7
1. 12	40. 0	1. 14	·1385	11. 53	·02708	22. 0	59 ·5	60 ·1
1. 16	41. 0	1. 20	·1383	12. 4	·02699	23. 0	59 ·4	60 ·3
1. 23	38. 55	1. 25	·1386	12. 29	·02643			
1. 54	39. 40	1. 40	·1378	13. 9	·02696			
1. 57	38. 50	1. 52	·1384	14. 49	·02768			
2. 23	39. 40	2. 9	·1376	15. 3	·02749			
	***	2. 25	·1382		***			
3. 11	37. 20	2. 42	·1380	15. 59	·02737			
3. 22	35. 45	3. 6	·1385	16. 9	·02702			
3. 26	35. 45	3. 26	·1376	16. 31	·02675			
3. 39	35. 10	3. 35	·1376	17. 15	·02723			
3. 57	37. 50	3. 52	·1382	18. 1	·02721			
4. 10	37. 10	4. 12	·1377	18. 14	·02729			
4. 13	35. 45	4. 26	·1382	19. 53	·02756			
4. 26	35. 10	4. 43	·1381	21. 34	·02760			
4. 37	36. 10	4. 56	·1386	22. 19	·02743			
4. 53	34. 50	5. 9	·1377	23. 59	·02743			
4. 58	34. 50	5. 12	·1373					
5. 9	33. 20	5. 24	·1372					
5. 11	33. 20	5. 44	·1365					
5. 23	31. 30	6. 20	·1380					
5. 43	29. 0	6. 27	·1378					
6. 8	31. 20	6. 59	·1384					
6. 12	31. 5	7. 24	·1385					
6. 26	32. 30	7. 56	·1383					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 18		Oct. 18						
h m	° ′ ″	h m		h m		h m	°	°
6.29	20.31.50	8.11	·1385					
7. 0	33.45	8.30	·1387					
7.38	33. 0	8.53	·1379					
7.59	31.30	9.24	·1380					
8.25	27.30	9.43	·1389					
8.38	28. 5	9.47	·1387					
8.44	26.50	10. 9	·1396					
9. 7	27.10	10.45	·1383					
9.11	27.50	10.55	·1375					
9.25	25.50	11.13	·1368					
9.34	26. 0	11.40:	·1389					
9.45	22. 5	11.52	·1384					
10.11	26.40	11.56	·1389					
10.42	29. 0	12. 6	·1385					
10.56	25.40	12.16	·1402					
11. 7	24.30	12.40	·1379					
11.34	38. 0	12.49	·1385					
11.41	39. 5	13.13	·1393					
11.47	42.10	13.27	·1390					
11.56	41. 0	13.45	·1385					
12. 9	43.10	14. 6	·1386					
12.12	41. 0	14.42	·1382					
12.23	41.50	14.53	·1389					
12.35	24. 0	14.57	·1386					
13. 9	27. 0	15.12	·1387					
13.38	25.35	15.15	·1391					
13.56	28. 0	15.26	·1385					
14.17	28.30	15.30	·1386					
14.40	32.40	15.52	·1371					
14.54	36.20	16.12	·1400					
15. 8	31. 0	16.27	·1414					
15.12	33. 5	16.37	·1407					
15.15	32.50	16.49	·1402					
15.25	33.40	16.56	·1394					
15.41	40. 0	17.40	·1372					
15.53	46.20	18. 6	·1369					
16. 3	37.40	18.14	·1386					
16. 7	37.40	18.19	·1392					
16.11	34.10	18.41	·1380					
16.24	28.50	19. 4	·1384					
16.27	28.20	19.19	·1382					
16.38	30.40	19.25	·1386					
16.41	29.45	19.50	·1382					
16.55	29.30	20.11	·1384					
17. 9	32.10	20.25	·1382					
17.14	32. 0	20.30	·1385					
17.25	32. 0	20.41	·1380					
17.31	33.30	20.49	·1384					
17.42	32.50	21.14	·1377					
17.53	35. 0	21.41	·1382					
18. 3	33. 0	21.48	·1379					
18. 8	33.30	22. 9	·1383					
18.12	32.10	22.15	·1377					
18.20	32.10	22.42	·1374					
18.29	30.35	22.57	·1373					
18.42	30.35	23.11	·1377					
18.54	31.15	23.19	·1372					
19. 1	30.10	23.38	·1368					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 18		Oct. 18						
h m	° ′ ″	h m		h m		h m	°	°
19.25	20.31. 0	23.50	·1376					
19.42	30.30	23.59	·1372					
20.11	30.30							
20.24	31.40							
20.33	30.10							
20.39	31.40							
20.53	31.40							
20.57	32.30							
21. 8	31.50							
	***							
21.37	34.20							
21.42	34.40							
22. 8	37.30							
22.23	37.10							
22.56	38.15							
23. 8	39.50							
23.24	39.30							
23.27	40.40							
23.51	43.50							
23.54	43.50							
23.59	44.25							
Oct. 19		Oct. 19		Oct. 19		Oct. 19		
0. 0	20.44.25	0. 0	·1372	0. 0	·02743	0. 0	59·4	60·3
0.25	42.55	0.12	·1371	1. 9	·02771	1. 0	59·5	60·5
0.39	43. 5	0.24	·1357	1.36	·02852	3. 0	59·5	60·4
0.42	44.55	0.29	·1368	1.54	·02829	Max.	60·1	62·4
0.53	44.55	0.37	·1375	2.11	·02868	9. 0	58·7	60·2
0.57	49.10	0.42	·1372	2.19	·02856	Min.	56·9	58·0
1. 6	48.10	0.45	·1378	2.35	·03012	21. 0	57·0	58·6
1. 8	44.30	0.49	·1374	2.41	·03036			
1.12	44.30	0.56	·1387	2.45	·02996			
1.25	36. 0	0.58	·1382	2.47	·03009			
1.41	37.30	1.11	·1360	2.55	·02937			
1.53	44. 0	1.24	·1398	3.53	·02908			
1.58	37.10	1.30	·1384	3.56	·02876			
2.10	42.10	1.45	·1381	4.19	·02911			
2.14	47. 5	1.58	·1348	4.36	·02922			
2.25	48.45	2. 3	·1370	4.48	·02897			
2.27	45.30	2.17	·1400	4.53	·02942			
2.39	31.10	2.26	·1360	4.56	·02953			
2.41	34.10	2.38	·1384	5.13	·02872			
2.53	14.40	2.42	·1417	5.31	·02870			
2.58	27.50	2.49	·1360	5.38	·02844			
3. 8	26.40	2.57	·1412	5.53	·02891			
3.22	42.40	3.10	·1393	6. 1	·02902			
3.27	40. 5	3.12	·1397	6.19	·02835			
3.32	42.40	3.22	·1386	6.32	·02847			
3.39	41.10	3.35	·1396	6.53	·02818			
3.55	51.15	3.39	·1396	7. 6	·02824			
3.57	53.50	3.52	·1409	7.10	·02793			
4. 2	52. 0	4. 5	·1379	7.25	·02814			
4. 8	47. 0	4.11	·1371	7.40	·02793			
4.13	43.55	4.26	·1385	8.13	·02809			
4.25	45. 0	4.40	·1372	8.19	·02832			
4.40	40.20	4.45	·1383	8.26	·02782			
4.46	42.40	5. 3	·1371	8.32	·02793			
4.57	32.10	5. 7	·1362	8.44	·02698			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 19		Oct. 19		Oct. 19				
h m	° ′ ″	h m		h m		h m	°	°
5. 7	20. 21. 20	5. 14	·1395	8. 53	·02718			
5. 13	40. 15	5. 24	·1374	8. 59	·02683			
5. 25	35. 45	5. 28	·1387	11. 13	·02729			
5. 28	41. 20	5. 35	·1361	13. 37	·02712			
5. 36	30. 0	5. 41	·1386	19. 3	·02661			
5. 45	38. 0	5. 56	·1345	20. 4	·02654			
5. 53	32. 0	6. 11	·1367	20. 54	·02643			
5. 57	15. 0	6. 24	·1391	22. 41	·02616			
6. 6	8. 10	6. 40	·1376	23. 59	·02626			
6. 26	15. 20	6. 49	·1388					
6. 38	16. 15	6. 52	·1385					
6. 41	18. 30	6. 56	·1389					
6. 45	26. 10	7. 11	·1367					
6. 53	23. 50	7. 15	·1374					
6. 58	29. 50	7. 23	·1346					
7. 6	28. 15	7. 42	·1366					
7. 11	34. 0	7. 51	·1356					
7. 14	30. 55	7. 57	·1358					
7. 22	31. 50	8. 0	·1355					
7. 25	29. 50	8. 20	·1357					
7. 31	32. 30	8. 34	·1393					
7. 41	33. 40	8. 37	·1388					
7. 55	32. 0	8. 43	·1409					
8. 10	32. 40	8. 54	·1363					
8. 22	18. 0	9. 4	·1393					
8. 31	31. 0	9. 12	·1366					
8. 39	40. 50	9. 24	·1353					
8. 53	31. 20	9. 39	·1370					
8. 59	40. 0	9. 50	·1377					
9. 11	31. 40	9. 56	·1372					
9. 13	31. 0	10. 10	·1374					
9. 24	21. 55	10. 13	·1373					
9. 28	22. 10	10. 21	·1374					
9. 39	21. 55	10. 35	·1370					
9. 53	25. 30	10. 52	·1372					
10. 10	28. 0	11. 0	·1369					
10. 25	31. 20	11. 24	·1377					
10. 28	31. 10	11. 31	·1372					
10. 39	31. 50	11. 43	·1377					
10. 43	31. 20	11. 54	·1375					
10. 55	31. 50	12. 15	·1380					
10. 58	30. 30	12. 27	·1376					
11. 23	31. 40	12. 34	·1378					
11. 27	31. 15	12. 43	·1376					
12. 10	34. 30	12. 50	·1377					
12. 13	33. 40	12. 53	·1374					
12. 16	34. 45	13. 12	·1378					
12. 25	33. 40	13. 19	·1376					
12. 42	33. 20	13. 26	·1379					
12. 55	33. 45	13. 30	·1377					
12. 59	34. 30	14. 13	·1381					
13. 11	33. 50	14. 55	·1379					
13. 19	35. 10	15. 40	·1382					
13. 29	34. 20	15. 52	·1380					
13. 33	34. 35	16. 11	·1385					
13. 43	34. 5	16. 41	·1381					
13. 47	34. 35	16. 46	·1385					
13. 53	33. [illegible]	16. 58	·1382					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 19		Oct. 19						
h m	° ′ ″	h m		h m		h m	°	°
13. 57	20. 34. 20	17. 11	·1386					
14. 10	33. 55	17. 20	·1380					
14. 24	34. 20	17. 36	·1381					
15. 11	33. 40	17. 43	·1378					
15. 26	34. 5	17. 56	·1387					
15. 38	33. 20	18. 15	·1384					
15. 43	34. 5	18. 26	·1386					
15. 56	32. 30	18. 42	·1384					
	***	18. 56	·1385					
16. 34	33. 35	19. 23	·1379					
16. 39	32. 40	19. 45	·1380					
	***	19. 53	·1384					
16. 59	33. 40	20. 4	·1377					
17. 26	33. 10	20. 12	·1380					
17. 30	33. 35	21. 23	·1374					
17. 39	32. 30	21. 35	·1368					
18. 6	33. 30	21. 42	·1374					
18. 11	32. 45	22. 0	·1367					
18. 58	32. 25	22. 16	·1370					
19. 39	31. 45		***					
19. 41	31. 0	23. 15	·1366					
19. 44	32. 35	23. 54	·1369					
19. 54	31. 45	23. 59	·1366					
19. 57	30. 0							
20. 9	31. 25							
20. 28	30. 30							
21. 9	31. 35							
21. 23	31. 15							
21. 27	31. 45							
21. 38	30. 50							
21. 43	32. 25							
22. 13	32. 25							
22. 25	34. 0							
22. 44	34. 30							
23. 11	36. 20							
23. 24	36. 5							
23. 55	38. 15							
23. 59	38. 10							
Oct. 20		Oct. 20		Oct. 20		Oct. 20		
0. 0	20. 38. 10	0. 0	·1366	0. 0	·02626	1. 0	58·1	59·0
0. 41	40. 50	0. 25	·1362	2. 45	·02666	3. 0	57·6	59·0
0. 56	41. 5	0. 45	·1366	2. 56	·02664	Max.	58·2	60·2
1. 5	40. 0	0. 59	·1362	3. 39	·02709	9. 0	57·8	59·0
1. 9	40. 5	1. 10	·1363	6. 54	·02652	Min.	56·2	57·3
1. 15	39. 30	1. 15	·1358	7. 3	·02664	21. 0	56·3	57·5
1. 42	41. 35	1. 41	·1367	7. 34	·02627			
1. 57	40. 30	1. 52	·1366	7. 46	·02638			
2. 7	39. 40	2. 8	·1374	8. 9	·02619			
2. 26	39. 0	2. 43	·1383	9. 37	·02611			
2. 42	39. 0	2. 53	·1378	9. 56	·02588			
2. 45	38. 25	3. 4	·1368	11. 4	·02579			
2. 55	38. 50	3. 23	·1383	11. 46	·02601			
2. 59	36. 0	3. 41	·1390		***			
3. 10	32. 45	3. 45	·1387	15. 49	·02572			
3. 14	31. 0	3. 55	·1388	20. 38	·02558			
3. 26	29. 40	4. 9	·1387	23. 59	·02533			
3. 31	29. 10	4. 27	·1389					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 20		Oct. 20						
h m	° ′ ″	h m		h m		h m	°	°
3. 43	20. 32. 0	4. 45	·1381					
3. 56	33. 10	5. 4	·1383					
4. 10	32. 30	5. 13	·1381					
4. 16	32. 40	5. 28	·1384					
4. 27	33. 50	5. 43	·1374					
4. 31	33. 20	5. 56	·1376					
4. 43	34. 30	6. 16	·1384					
5. 8	32. 40	6. 27	·1381					
5. 23	31. 25	6. 45	·1386					
5. 40	33. 15	6. 55	·1383					
5. 55	34. 0	7. 12	·1407					
5. 59	34. 20	7. 20	·1399					
6. 12	34. 0	7. 26	·1399					
6. 39	35. 30	7. 40	·1388					
6. 45	35. 10	7. 56	·1409					
7. 0	27. 20	8. 20:	·1391					
7. 23	34. 30	8. 40	·1394					
7. 29	34. 30	8. 56	·1382					
7. 42	25. 50	9. 7	·1387					
7. 57	32. 40	9. 20	·1383					
8. 27	30. 55	9. 32	·1396					
8. 42	31. 35	9. 41	·1392					
8. 55	28. 50	9. 50	·1399					
9. 4	29. 0	10. 10	·1388					
9. 13	30. 40	10. 26	·1404					
9. 23	30. 40	10. 40	·1398					
9. 28	31. 35	10. 56	·1392					
9. 38	31. 35	11. 16	·1377					
9. 44	34. 45	11. 45	·1386					
9. 56	34. 45	11. 56	·1384					
10. 10	29. 30	12. 9	·1387					
10. 28	31. 30	12. 36	·1385					
10. 44	29. 55	13. 12	·1389					
10. 57	30. 5	13. 26	·1384					
11. 14	26. 50	13. 42	·1387					
11. 26	26. 50	13. 59	·1381					
11. 43	29. 30	14. 12	·1382					
11. 53	29. 30	14. 41	·1390					
11. 58	30. 30	14. 50	·1386					
12. 26	28. 10	14. 58	·1389					
12. 33	29. 0	15. 26	·1388					
13. 14	30. 10	16. 0	·1392					
13. 21	29. 5	16. 34	·1400					
13. 38	28. 50	16. 43	·1396					
13. 53	30. 45	17. 11	·1398					
14. 14	29. 50	17. 20	·1406					
14. 25	30. 25	17. 26	·1399					
14. 43	29. 50	17. 40	·1407					
14. 53	30. 20	17. 43	·1403					
14. 56	29. 55	17. 57	·1405					
15. 3	31. 0	18. 10	·1403					
15. 30	31. 30	18. 19	·1406					
15. 40	32. 5	18. 29	·1401					
15. 56	33. 30	18. 40	·1405					
16. 8	33. 0	18. 46	·1395					
16. 23	33. 10	18. 57	·1395					
16. 28	32. 30	19. 3	·1403					
16. 39	33. 0	19. 13	·1398					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 20		Oct. 20						
h m	° ′ ″	h m		h m		h m	°	°
16. 44	20. 32. 20	19. 36	·1400					
16. 55	32. 50	20. 5	·1396					
17. 9	32. 50	20. 43	·1394					
17. 23	33. 5	20. 49	·1396					
17. 26	36. 10	22. 2	·1386					
17. 41	33. 30	22. 30	·1387					
17. 51	32. 30	22. 56	·1385					
17. 54	32. 30	23. 30	·1394					
17. 56	31. 50	23. 59	·1389					
18. 3	33. 30							
18. 10	33. 20							
18. 13	32. 20							
18. 26	33. 0							
18. 30	32. 30							
18. 39	33. 10							
18. 56	31. 30							
19. 3	32. 30							
19. 15	32. 0							
19. 38	32. 5							
19. 50	33. 0							
20. 13	31. 30							
20. 26	31. 10							
21. 11	33. 0							
21. 14	32. 30							
22. 8	33. 45							
22. 40	35. 30							
22. 43	36. 10							
22. 53	35. 30							
23. 14	36. 25							
23. 23	37. 20							
23. 27	36. 30							
23. 40	38. 50							
23. 49	38. 30							
23. 56	37. 30							
23. 59	38. 10							
Oct. 21		Oct. 21		Oct. 21		Oct. 21		
0. 0	20. 38. 10	0. 0	·1389	0. 0	·02533	Min.	56·7	57·9
0. 26	38. 20	0. 25	·1390	1. 49	·02554	1. 0	56·8	58·0
0. 39	39. 30	0. 41	·1393	2. 32	·02591	3. 0	57·3	58·5
0 44	38. 55	0. 45	·1391	2. 43	·02586	9. 0	57·8	59·0
0. 57	41. 20	0. 54	·1398	3. 0	·02605	21. 15	58·6	59·3
1. 8	40. 55	1. 11	·1394	3. 36	·02609	Max.	58·7	60·2
1. 28	41. 25	1. 19	·1396	4. 8	·02618			
1. 41	40. 10	1. 40	·1392	4. 40	·02636			
1. 53	40. 10	1. 51	·1393	5. 1	·02619			
1. 57	39. 55	1. 57	·1389	5. 30	·02637			
2. 8	41. 50	2. 11	·1394	5. 54	·02637			
2. 24	38. 50	2. 22	·1386	7. 15	·02610			
2. 39	38. 35	2. 40	·1391	8. 38	·02612			
2. 56	32. 30	2. 52	·1376	9. 3	·02606			
3. 3	32. 30	3. 4	·1386	19. 34	·02628			
3. 11	31. 40	3. 13	·1385	22. 9	·02604			
3. 27	32. 40	3. 28	·1393	23. 59	·02622			
3. 38	31. 25	3. 51	·1382					
3. 51	32. 50	4. 10	·1388					
3. 56	32. 20	4. 22	·1384					
4. 11	33. 0	4. 45	·1393					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct.21		Oct.21						
h m	° ′ ″	h m		h m		h m	°	°
4. 24	20. 31. 15	5. 0	·1377					
4. 29	31. 40	5. 13	·1367					
4. 41	33. 35	5. 25	·1374					
4. 52	36. 10	5. 41	·1379					
4. 58	33. 30	5. 56	·1385					
5. 12	27. 10	6. 11	·1379					
5. 27	26. 30	6. 41	·1390					
5. 38	28. 10	7. 33	·1394					
5. 41	28. 10	7. 54	·1391					
6. 2	34. 45	8. 11	·1393					
6. 14	34. 20	8. 22	·1392					
6. 40	35. 30	8. 42	·1401					
6. 53	35. 30	8. 57	·1392					
7. 9	34. 40	9. 12	·1386					
7. 26	34. 30	9. 28	·1387					
7. 43	35. 10	9. 40	·1391					
7. 55	33. 50	10. 12	·1386					
8. 7	34. 10	10. 31	·1392					
8. 13	30. 40	10. 48	·1389					
8. 26	29. 55	11. 10	·1391					
8. 41	33. 0	11. 18	·1394					
8. 50	33. 0	11. 34	·1389					
9. 12	29. 55	11. 43	·1393					
9. 28	29. 40	11. 57	·1389					
9. 55	32. 0	12. 25	·1392					
10. 8	31. 40	12. 54	·1391					
10. 27	33. 5	13. 12	·1394					
10. 43	32. 55	13. 24	·1392					
10. 53	33. 5	13. 56	·1395					
11. 8	32. 30	16. 10	·1394					
11. 23	34. 10	16. 20	·1396					
11. 34	32. 10	16. 34	·1392					
13. 26	33. 25	16. 43	·1396					
13. 41	34. 15	16. 54	·1394					
14. 23	33. 35	19. 24	·1393					
15. 54	33. 25	21. 23	·1387					
15. 56	33. 50	22. 12	·1382					
16. 9	33. 10	23. 22	·1385					
16. 22	33. 55	23. 42	·1389					
16. 27	33. 10	23. 59	·1390					
16. 40	33. 30							
16. 43	34. 20							
16. 51	33. 15							
17. 8	33. 5							
18. 13	32. 50							
19. 24	31. 55							
20. 32	31. 20							
21. 8	31. 20							
22. 59	36. 5							
23. 11	36. 5							
23. 59	37. 15							
Oct.22		Oct.22		Oct.22		Oct.22		
0. 0	20. 37. 15	0. 0	·1390	0. 0	·02622	1. 0	59·3	60·1
0. 50	38. 20	1. 10	·1394	4. 9	·02681	Max.	59·9	61·9
0. 59	38. 0	2. 14	·1396	7. 53	·02722	8. 0	59·6	61·3
1. 58	38. 10	2. 45	·1393	16. 13	·02698	Min.	57·9	59·5
2. 9	38. 10	3. 14	·1396	19. 54	·02676	21. 0	58·8	59·9

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct.22		Oct.22		Oct.22				
h m	° ′ ″	h m		h m		h m	°	°
2. 44	20. 37. 0	5. 44	·1394	22. 27	·02641			
2. 56	37. 10	6. 2	·1397	23. 59	·02653			
3. 28	36. 30	6. 22	·1396					
4. 23	35. 40	6. 42	·1399					
4. 56	35. 30	6. 55	·1393					
5. 10	35. 50	7. 11	·1391					
5. 30	34. 45	7. 20	·1393					
6. 38	35. 5	7. 36	·1388					
6. 58	35. 40	8. 28	·1397					
7. 25	34. 35	8. 50	·1392					
7. 39	33. 45	9. 0	·1405					
7. 56	33. 20	9. 14	·1407					
8. 29	34. 5	9. 50	·1387					
8. 53	33. 55	10. 34	·1395					
8. 57	29. 30	10. 54	·1389					
9. 29	30. 40	11. 6	·1393					
9. 39	30. 10	11. 16	·1390					
9. 42	30. 30	11. 40	·1392					
9. 52	30. 30	11. 54	·1389					
9. 56	30. 15	13. 49	·1392					
10. 8	31. 0	14. 11	·1393					
10. 12	30. 50	17. 41	·1397					
10. 23	31. 30	18. 18	·1399					
10. 41	31. 30	19. 25	·1398					
10. 53	30. 55	20. 43	·1393					
11. 4	32. 15	21. 25	·1392					
11. 13	31. 0	21. 56	·1396					
11. 47	33. 20	22. 11	·1393					
11. 56	33. 0	22. 48	·1391					
12. 24	34. 0	23. 19	·1393					
12. 38	33. 25	23. 59	·1394					
14. 23	33. 10							
14. 31	33. 30							
14. 42	33. 45							
15. 8	33. 0							
15. 27	33. 35							
15. 41	33. 10							
16. 8	33. 10							
16. 12	32. 20							
16. 26	33. 35							
16. 44	33. 55							
16. 57	33. 20							
17. 29	34. 0							
18. 14	32. 25							
19. 25	33. 0							
19. 56	32. 20							
20. 23	32. 10							
20. 43	31. 40							
20. 57	31. 40							
21. 46	33. 0							
21. 57	34. 25							
22. 11	34. 0							
23. 8	36. 10							
23. 12	35. 50							
23. 25	36. 30							
23. 59	37. 5							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 23		Oct. 23		Oct. 23		Oct. 23		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 37. 5	0. 0	·1394	0. 0	·02653	1. 0	58·6	59·6
0. 58	38. 15	0. 26	·1398	2. 29	·02664	3. 0	58·8	59·9
1. 54	38. 0	1. 57	·1400	3. 1	·02675	Max.	59·0	60·7
2. 28	36. 50	2. 14	·1397	6. 56	·02681	9. 0	58·8	60·0
2. 44	36. 35	2. 52	·1400	7. 19	·02676	Min.	57·5	58·8
2. 56	37. 5	2. 58	·1404	7. 53	·02697	21. 0	57·8	59·0
3. 7	36. 10	3. 12	·1398	8. 34	·02677			
3. 39	35. 30	3. 41	·1396	17. 44	·02664			
4. 12	35. 30	5. 14	·1402	19. 26	·02657			
4. 47	35. 50	5. 26	·1395	23. 59	·02622			
4. 55	35. 10	5. 50	·1399					
5. 0	36. 0	6. 11	·1398					
5. 12	35. 0	6. 25	·1401					
5. 25	35. 35	6. 43	·1398					
5. 30	35. 10	7. 7	·1403					
5. 44	35. 25	7. 27	·1385					
6. 3	35. 10	7. 59	·1394					
6. 11	34. 40	8. 12	·1406					
6. 43	34. 50	8. 39	·1404					
7. 9	35. 0	8. 55	·1396					
7. 30	30. 15	10. 12	·1397					
7. 57	33. 5	10. 56	·1396					
8. 8	30. 50	12. 11	·1394					
8. 13	31. 20	12. 27	·1397					
8. 23	31. 0	12. 53	·1394					
8. 28	29. 30	13. 22	·1398					
8. 41	29. 50	14. 6	·1397					
9. 12	33. 5	15. 15	·1398					
9. 56	32. 45	15. 35	·1399					
10. 13	33. 5	17. 0	·1398					
11. 6	32. 30	17. 52	·1396					
11. 56	32. 25	18. 3	·1401					
12. 16	32. 40	18. 13	·1398					
13. 0	32. 25	18. 34	·1403					
13. 12	33. 5	20. 0	·1398					
13. 38	32. 40	20. 20	·1399					
13. 56	32. 55	21. 27	·1390					
14. 11	32. 40	22. 40	·1387					
15. 26	33. 50	23. 37	·1386					
15. 38	33. 0	23. 59	·1392					
16. 38	33. 30							
16. 58	33. 0							
17. 14	33. 20							
17. 26	33. 5							
17. 41	32. 55							
17. 53	32. 45							
17. 56	34. 0							
18. 8	32. 15							
18. 14	32. 10							
18. 28	32. 40							
19. 53	31. 0							
20. 27	30. 50							
21. 11	30. 45							
23. 21	35. 15							
23. 44	36. 0							
23. 59	37. 5							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 24		Oct. 24		Oct. 24		Oct. 24		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 37. 5	0. 0	·1392	0. 0	·02622	1. 0	58·8	60·5
0. 31	37. 30	0. 43	·1395	2. 25	·02673	3. 0	58·8	60·5
0. 42	38. 10	0. 55	·1393	11. 57	·02679	Max.	59·5	61·4
0. 57	38. 10	1. 58	·1395	22. 16	·02622	9. 0	58·8	60·5
1. 24	38. 0	2. 22	·1397	23. 59	·02634	Min.	57·7	58·9
1. 44	38. 0	3. 11	·1390			21. 0	58·2	59·2
2. 9	37. 30	3. 48	·1393			22. 30	58·5	59·6
2. 28	37. 30	4. 19	·1388			23. 0	58·7	59·6
2. 58	36. 40	4. 55	·1394					
3. 14	35. 20	5. 14	·1392					
3. 39	36. 5	5. 44	·1396					
4. 39	34. 30	6. 13	·1395					
4. 56	35. 0	7. 12	·1398					
5. 24	33. 25	8. 22	·1394					
5. 53	34. 30	8. 56	·1396					
6. 8	34. 5	9. 40	·1394					
6. 36	35. 0	10. 28	·1396					
6. 41	34. 30	10. 44	·1395					
6. 58	34. 50	11. 42	·1395					
7. 30	34. 40	12. 5	·1393					
7. 42	34. 5	13. 41	·1395					
9. 11	33. 0	14. 13	·1394					
9. 23	33. 0	18. 29	·1400					
9. 28	33. 20	20. 0	·1398					
10. 14	32. 30	21. 30	·1391					
10. 26	33. 0	22. 52	·1388					
10. 51	32. 20	23. 59	·1394					
11. 6	32. 30							
11. 54	32. 5							
12. 24	33. 10							
13. 23	33. 10							
15. 8	33. 30							
15. 23	34. 10							
15. 43	33. 40							
16. 9	34. 0							
16. 24	33. 10							
16. 41	33. 40							
16. 56	33. 10							
17. 43	32. 25							
18. 7	33. 0							
18. 51	32. 45							
19. 28	32. 5							
21. 5	32. 20							
	***							
23. 15	37. 10							
23. 59	37. 40							
Oct. 25		Oct. 25		Oct. 25		Oct. 25		
0. 0	20. 37. 40	0. 0	·1394	0. 0	·02634	0. 0	58·9	59·7
0. 30	39. 5	0. 29	·1398	2. 1	·02642	1. 0	58·9	59·9
0. 42	39. 0	0. 49	·1401	2. 16	·02668	3. 0	58·9	60·1
0. 54	39. 45	0. 57	·1402	3. 2	·02647	Max.	59·8	61·5
1. 12	38. 45	1. 11	·1400	4. 39	·02655	9. 0	58·8	60·0
1. 37	41. 50	1. 30	·1413	4. 44	·02662	Min.	57·2	58·2
1. 44	41. 0	1. 52	·1407	5. 35	·02691	21. 0	57·8	58·8
1. 54	39. 30	1. 57	·1403	6. 19:	·02737	22. 0	57·8	58·8
1. 58	39. 30	2. 8	·1412	7. 24	·02696	23. 0	57·8	58·8
2. 7	38. 20	2. 15	·1417	10. 54	·02671			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct.25		Oct.25		Oct.25				
h m	° ′ ″	h m		h m		h m	°	°
2. 12	20. 42. 0	2. 35	·1406	11. 10	·02657			
2. 24	43. 10	2. 42	·1409	11. 54	·02659			
2. 28	41. 30	2. 45	·1405	12. 9	·02663			
2. 39	40. 40	2. 50	·1406	13. 6	·02644			
2. 43	40. 40	3. 6	·1393	23. 0	·02597			
2. 51	39. 45	3. 13	·1394	23. 59	·02599			
2. 56	40. 10	3. 32	·1404					
2. 57	37. 0	3. 41	·1413					
3. 9	39. 10	3. 45	·1403					
3. 16	39. 50	4. 19	·1406					
3. 42	42. 50	4. 41	·1412					
3. 44	40. 15	4. 54	·1419					
3. 55	40. 30	5. 11	·1413					
4. 9	39. 55	5. 35	·1394					
4. 12	40. 5	5. 49	·1372					
4. 26	39. 30	6. 0	·1377					
4. 45	40. 50	6. 11	·1374					
5. 8	40. 50	6. 53	·1388					
5. 28	45. 55	7. 15	·1396					
5. 39	44. 30	7. 26	·1403					
6. 7	32. 0	7. 44	·1395					
6. 14	30. 20	8. 11	·1393					
6. 24	30. 55	8. 41	·1396					
6. 42	36. 15	9. 0	·1394					
6. 44	35. 10	9. 30	·1392					
6. 56	36. 35	9. 41	·1394					
7. 13	36. 45	10. 22	·1387					
7. 53	35. 30	10. 46	·1388					
7. 58	35. 30	11. 12	·1396					
8. 14	34. 30	11. 18	·1393					
8. 25	34. 40	11. 30	·1400					
8. 51	33. 30	11. 43	·1392					
9. 24	33. 30	12. 11	·1381					
9. 54	32. 0	12. 57	·1394					
10. 14	30. 30	13. 26	·1390					
10. 51	30. 40	15. 40	·1395					
11. 9	30. 0	16. 27	·1398					
11. 23	22. 10	17. 44	·1397					
11. 38	24. 30	19. 14	·1403					
12. 6	27. 50	21. 32	·1394					
12. 42	34. 30	21. 43	·1397					
12. 55	34. 0	21. 54	·1394					
13. 0	34. 0	22. 25	·1396					
13. 13	33. 20	22. 55	·1394					
13. 26	34. 10	23. 23	·1398					
13. 39	33. 40	23. 40	·1397					
13. 56	33. 40	23. 53	·1403					
14. 10	33. 20	23. 59	·1401					
14. 23	33. 55							
14. 42	33. 55							
14. 52	33. 45							
14. 55	33. 45							
15. 10	33. 20							
15. 55	33. 55							
16. 37	32. 45							
17. 10	33. 15							
17. 41	32. 45							
19. 54	32. 20							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct.25								
h m	° ′ ″	h m		h m		h m	°	°
19. 58	20. 31. 50							
20. 9	32. 30							
	***							
20. 56	32. 30							
	***							
21. 26	33. 15							
21. 38	33. 0							
21. 43	34. 5							
21. 56	33. 50							
	***							
23. 25	37. 10							
23. 29	37. 10							
23. 42	37. 30							
23. 56	38. 30							
23. 59	38. 0							
Oct.26		Oct.26		Oct.26		Oct.26		
0. 0	20. 38. 0	0. 0	·1401	0. 0	·02599	0. 0	57 ·8	58 ·8
0. 30	38. 15	0. 40	·1404	1. 53	·02621	Min.	57 ·8	58 ·8
0. 48	43. 0	0. 52	·1413	2. 43	·02648	1. 0	58 ·1	59 ·2
0. 57	41. 55	1. 6	·1404	3. 9	·02673	3. 0	58 ·2	59 ·0
1. 26	41. 55	1. 34	·1399	3. 18	·02703	9. 0	59 ·3	61 ·0
1. 40	40. 15	1. 54	·1383	3. 32	·02815	Max.	60 ·0	61 ·7
1. 54	41. 45	2. 14	·1389	3. 35	·02804	21. 0	59 ·3	61 ·0
2. 11	46. 25	2. 25	·1393	3. 39	·02853			
2. 13	46. 5	2. 42	·1387	3. 40	·02795			
2. 27	47. 0		***	3. 54	·02802			
2. 34	46. 45	2. 56	·1382	4. 1	·02843			
2. 39	47. 50	3. 15	·1388	4. 14	·02852			
2. 53	46. 45	3. 25	·1385	4. 16	·02866			
3. 9	47. 10	3. 33	·1397	4. 18	·02849			
3. 23	48. 35	3. 41	·1425	4. 24	·02897			
3. 26	44. 5	3. 45	·1412	4. 31	·02861			
3. 38	51. 20	3. 50	·1382	4. 35	·02879			
3. 42	34. 0	3. 56	·1404	4. 41	·02863			
3. 44	37. 0	4. 11	·1384	4. 54	·02863			
3. 50	30. 0	4. 14	·1397	5. 9	·03011			
3. 52	32. 20	4. 21	·1372	5. 14	·03048			
3. 55	32. 20	4. 27	·1386	5. 18	·03020			
4. 5	40. 5	4. 40	·1367	5. 23	·03019			
4. 11	37. 5	4. 44	·1370	5. 24	·02988			
4. 13	43. 50	4. 50	·1389	5. 27	·03011			
4. 15	39. 0	5. 0	·1384	5. 34	·02862			
4. 18	37. 0	5. 4	·1388	5. 44	·02801			
4. 26	43. 50	5. 13	·1370	6. 28	·02762			
4. 29	44. 20	5. 25	·1392	6. 47	·02760			
4. 39	34. 10	5. 37	·1345	7. 25	·02809			
4. 55	43. 30	5. 43	·1356	7. 40	·02743			
4. 57	43. 10	5. 44	·1351	7. 48	·02745			
4. 59	46. 50	5. 53	·1367	7. 55	·02750			
5. 4	45. 15	6. 0	·1359	8. 6	·02732			
5. 9	39. 0	6. 7	·1342	8. 15	·02730			
5. 23	44. 0	6. 13	·1346	8. 26	·02711			
5. 33	15. 5	6. 27	·1373	9. 27	·02728			
5. 44	18. 0	6. 45	·1343	11. 6	·02712			
5. 56	25. 50	7. 2	·1353	11. 16	·02691			
6. 6	19. 0	7. 12	·1349	11. 55	·02682			
6. 11	17. 15	7. 24	·1353	12. 26	·02702			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct.26		Oct.26		Oct.26				
h m	° ′ ″	h m		h m		h m	°	°
6. 39	20 32. 10	7. 30	·1352	20. 55	·02709			
6. 53	23. 20	7. 43	·1371		·02760			
7. 11	30. 20	7. 48	·1402	23. 59	·02778			
7. 12	30. 10	7. 54	·1393					
7. 29	35. 10	8. 0	·1391					
7. 37	22. 25	8. 9	·1355					
7. 42	30. 10	8. 16	·1391					
7. 53	28. 30	8. 24	·1376					
7. 59	37. 0	8. 35	·1388					
8. 8	22. 0	8. 43	·1363					
8. 13	27. 10	8. 54	·1377					
8. 25	23. 10	9. 4	·1360					
8. 38	28. 55	9. 26	·1366					
8. 42	21. 50	9. 36	·1357					
8. 56	26. 45	9. 49	·1364					
8. 59	23. 40	10. 4	·1373					
9. 7	23. 15	10. 14	·1367					
9. 25	29. 10	10. 25	·1370					
9. 30	27. 55	10. 37	·1374					
9. 41	28. 55	10. 42	·1369					
9. 44	28. 30	10. 51	·1367					
9. 56	29. 45	11. 6	·1372					
10. 13	29. 45	11. 14	·1371					
10. 26	30. 20	11. 26	·1378					
10. 43	29. 25	11. 41	·1393					
10. 55	30. 0	11. 45	·1384					
10. 57	31. 35	11. 54	·1390					
11. 9	32. 5	12. 5	·1380					
11. 24	30. 15	12. 30	·1372					
11. 33	33. 10	12. 40	·1375					
11. 41	33. 0	12. 42	·1372					
11. 53	35. 25	12. 49	·1377					
12. 23	29. 40	12. 53	·1373					
12. 53	32. 0	13. 14	·1369					
13. 8	30. 25	13. 22	·1372					
13. 33	31. 40	13. 45	·1370					
13. 56	31. 50	14. 0	·1374					
14. 6	33. 20	14. 13	·1370					
14. 13	32. 0	14. 22	·1373					
14. 26	31. 40	14. 50	·1376					
14. 29	32. 10	14. 55	·1374					
14. 37	31. 30	15. 26	·1379					
14. 42	31. 40	15. 42	·1376					
14. 55	32. 40	16. 0	·1380					
15. 11	32. 40	16. 9	·1376					
15. 27	32. 0	16. 16	·1379					
15. 44	31. 50	16. 30	·1386					
16. 3	32. 45	16. 48	·1382					
16. 11	32. 45	16. 55	·1384					
16. 15	30. 0	17. 8	·1378					
16. 27	30. 10	17. 14	·1379					
16. 42	29. 20	17. 24	·1376					
16. 57	31. 40	17. 35	·1380					
17. 8	30. 30	17. 42	·1376					
17. 37	33. 15	18. 18	·1381					
17. 43	32. 45	18. 24	·1379					
17. 54	32. 45	18. 33	·1382					
18. 9	31. 45	18. 56	·1381					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct.26		Oct.26						
h m	° ′ ″	h m		h m		h m	°	°
18. 25	20. 33. 20	19. 4	·1386					
18. 43	32. 20	19. 9	·1381					
	***	19. 14	·1384					
18. 59	31. 45	19. 40	·1380					
19. 11	32. 20	20. 9	·1382					
19. 22	31. 40	20. 16	·1377					
	***	20. 25	·1382					
19. 58	33. 10	20. 41	·1379					
20. 13	31. 40	20. 48	·1383					
20. 24	32. 40	20. 56	·1375					
20. 29	32. 10		***					
20. 41	32. 10	21. 10	·1379					
20. 45	33. 45	21. 30	·1369					
20. 56	32. 10	21. 43	·1374					
20. 58	34. 10	21. 50	·1371					
21. 4	32. 55	22. 10	·1373					
21. 37	31. 30	22. 15	·1371					
21. 41	32. 55	22. 23	·1375					
21. 43	32. 20	22. 53	·1371					
21. 46	32. 20	23. 10	·1364					
21. 55	32. 50	23. 19	·1365					
21. 58	32. 15	23. 42	·1361					
22. 10	33. 0	23. 59	·1366					
22. 13	32. 30							
22. 23	34. 40							
22. 39	35. 50							
22. 42	35. 15							
22. 56	36. 40							
23. 1	35. 0							
23. 12	34. 5							
23. 27	33. 40							
23. 59	35. 30							
Oct.27		Oct.27		Oct.27		Oct.27		
0. 0	20. 35. 30	0. 0	·1366	0. 0	·02778	1. 0	60 ·1	61 ·5
0. 26	36. 20	0. 24	·1372	1. 44	·02790	3. 0	60 ·1	61 ·5
0. 43	37. 15	1. 16	·1378	4. 7	·02811	Max.	60 ·7	62 ·2
1. 19	36. 5	1. 38	·1378	5. 13	·02800	9. 0	58 ·8	60 ·5
1. 26	36. 55	1. 53	·1386	8. 38	·02792	Min.	57 ·4	58 ·4
1. 44	36. 30	2. 30	·1383		·02857	21. 0	57 ·8	59 ·0
2. 11	37. 20	2. 50	·1385	21. 56	·02762			
2. 34	36. 30	3. 14	·1382	23. 59	·02777			
2. 44	36. 40	3. 25	·1384					
3. 11	35. 50	3. 34	·1379					
3. 22	35. 50	3. 53	·1384					
3. 26	34. 50	4. 34	·1386					
3. 41	34. 0	5. 14	·1385					
4. 9	34. 0	5. 54	·1388					
4. 15	34. 40	6. 14	·1381					
4. 26	34. 20	6. 28	·1385					
4. 41	35. 5	6. 59	·1379					
4. 47	34. 30	7. 23	·1373					
5. 22	35. 5	7. 32	·1378					
5. 33	34. 30	7. 41	·1378					
5. 56	34. 30	7. 55	·1382					
6. 26	36. 0	8. 41	·1386					
6. 45	35. 20	8. 58	·1394					
6. 56	35. 45	9. 12	·1410					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 27		Oct. 27						
h m	° ′ ″	h m		h m		h m	°	°
7. 9	20. 34. 50	9. 36	·1400					
7. 29	31. 0	10. 4	·1397					
7. 40	31. 35	11. 13	·1391					
7. 44	31. 35	11. 36	·1395					
7. 58	33. 0	11. 52	·1389					
8. 8	33. 10	12. 10	·1392					
8. 12	33. 45	12. 41	·1393					
8. 23	33. 5	12. 54	·1395					
8. 40	34. 20	13. 11	·1393					
8. 42	33. 0	13. 22	·1396					
8. 57	29. 45	13. 40	·1392					
9. 4	26. 10	14. 29	·1394					
9. 15	30. 30	14. 41	·1393					
9. 27	30. 0	15. 22	·1398					
9. 44	31. 30	15. 56	·1394					
9. 55	31. 30	16. 13	·1390					
10. 10	30. 15	16. 25	·1393					
10. 13	30. 35	16. 40	·1392					
10. 39	28. 30	17. 15	·1396					
11. 12	30. 0	17. 21	·1394					
11. 24	31. 0	17. 33	·1396					
11. 40	29. 30	17. 40	·1393					
12. 11	31. 40	17. 59	·1398					
12. 44	31. 40	18. 24	·1404					
12. 57	31. 15	18. 39	·1400					
13. 16	31. 30	18. 45	·1403					
13. 26	32. 20	19. 12	·1392					
13. 42	30. 55	19. 37	·1398					
13. 56	30. 40	19. 42	·1396					
14. 10	31. 35	19. 56	·1398					
14. 23	31. 15	20. 26	·1396					
14. 40	32. 0	21. 10	·1395					
14. 54	31. 45	21. 14	·1386					
15. 7	32. 5	21. 25	·1393					
15. 28	30. 20	21. 49	·1390					
15. 54	32. 30	22. 44	·1388					
17. 14	32. 40	23. 11	·1389					
17. 28	31. 20	23. 27	·1388					
17. 43	30. 30	23. 59	·1390					
18. 14	32. 15							
18. 30	31. 0							
18. 41	31. 0							
18. 56	30. 10							
19. 12	31. 15							
19. 25	30. 30							
19. 28	31. 10							
19. 39	30. 30							
	* * *							
20. 14	30. 40							
20. 26	30. 0							
21. 6	30. 0							
21. 11	31. 10							
21. 25	31. 10							
21. 28	30. 30							
21. 39	31. 0							
21. 42	32. 15							
21. 52	31. 40							
22. 10	31. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 27								
h m	° ′ ″	h m		h m		h m	°	°
23. 38	20. 35. 20							
23. 59	35. 30							
Oct. 28		Oct. 28		Oct. 28		Oct. 28		
0. 0	20. 35. 30	0. 0	·1390	0. 0	·02777	1. 0	58 ·8	60 ·0
0. 7	35. 10	0. 14	·1394	2. 31	·02811	3. 0	59 ·2	60 ·5
0. 12	36. 15	0. 25	·1393		·02662	Max.	59 ·7	61 ·7
0. 21	35. 45	0. 45	·1397	10. 6	·02681	9. 0	59 ·2	60 ·5
0. 39	36. 10	1. 18	·1392	10. 52	·02670	Min.	57 ·1	57 ·9
0. 44	37. 0	2. 6	·1400	14. 2	·02652	21. 0	57 ·3	58 ·0
0. 58	36. 45	2. 12	·1398		(†)			
1. 11	36. 0	2. 26	·1400	21. 0	·02614*			
1. 41	35. 50	2. 39	·1399	22. 55	·02558			
2. 24	36. 15	2. 44	·1392	23. 59	·02562			
2. 38	35. 30	2. 59	·1394					
2. 41	36. 50	3. 24	·1392					
3. 26	36. 0	3. 29	·1394					
3. 51	35. 10	3. 42	·1392					
6. 12	34. 30	5. 14	·1391					
7. 26	35. 0	5. 44	·1390					
7. 53	34. 30	6. 51	·1389					
8. 13	34. 20	7. 52	·1387					
8. 24	33. 20	8. 4	·1390					
8. 30	33. 50	8. 12	·1388					
8. 56	28. 50	8. 24	·1391					
9. 3	29. 0	9. 0	·1384					
9. 23	31. 45	9. 18	·1391					
9. 39	30. 45	10. 12	·1382					
9. 55	29. 40	10. 35	·1390					
10. 8	30. 35	10. 54	·1391					
10. 44	29. 30	11. 11	·1385					
10. 53	29. 30	11. 19	·1386					
11. 8	30. 20	11. 26	·1383					
11. 25	30. 0	11. 45	·1387					
11. 37	30. 40	11. 59	·1380					
11. 41	31. 40	12. 39	·1384					
11. 53	31. 15		(†)					
12. 8	32. 5	21. 0	·1388*					
12. 23	31. 30	21. 36	·1383					
12. 40	32. 45	22. 25	·1385					
12. 47	32. 20	23. 25	·1387					
12. 59	33. 15	23. 59	·1390					
13. 29	32. 40							
13. 54	32. 40							
13. 59	31. 55							
14. 11	31. 55							
14. 30	34. 30							
14. 39	34. 30							
14. 45	33. 10							
15. 9	32. 5							
15. 26	32. 40							
15. 55	32. 20							
16. 30	31. 15							
17. 0	31. 40							
17. 17	31. 40							
17. 30	33. 10							
17. 43	33. 10							
18. 11	31. 40							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct.28								
h m	° ′ ″	h m		h m		h m	°	°
19. 12	20. 34. 55							
19. 29	33. 10							
19. 45	34. 15							
19. 58	34. 15							
20. 56	32. 0							
21. 29	32. 40							
21. 56	35. 20							
21. 59	34. 40							
22. 23	33. 20							
22. 38	34. 40							
22. 42	34. 15							
22. 54	35. 10							
23. 25	33. 20							
23. 38	34. 20							
23. 59	34. 50							
Oct.29		Oct.29		Oct.29		Oct.29		
0. 0	20. 34. 50	0. 0	·1390	0. 0	·02562	0. 0	56 ·8	58 ·0
0. 29	35. 35	0. 55	·1394	1. 56	·02573	Min.	56 ·6	57 ·8
0. 38	35. 10	1. 3	·1392	3. 34	·02609	8. 0	59 ·8	61 ·5
0. 42	35. 30	1. 13	·1396	9. 40	·02672	Max.	60 ·3	62 ·0
0. 52	35. 10	1. 26	·1394	20. 42	·02658	21. 0	59 ·6	60 ·5
0. 58	36. 0	1. 42	·1396	22. 56	·02631			
1. 11	36. 0	2. 19	·1392	23. 4	·02623			
1. 14	36. 40	2. 39	·1394	23. 59	·02636			
1. 35	36. 5	3. 5	·1386					
1. 49	37. 20	3. 19	·1388					
2. 9	36. 55	3. 43	·1381					
2. 30	36. 35	3. 57	·1386					
3. 0	35. 30	4. 15	·1384					
3. 27	38. 0	5. 20	·1392					
3. 43	35. 40	5. 49	·1394					
3. 56	36. 5	6. 57	·1388					
4. 14	35. 20	7. 13	·1390					
4. 32	35. 40	7. 49	·1385					
4. 56	34. 40	10. 0	·1390					
5. 9	34. 55	10. 26	·1386					
5. 13	33. 45	10. 49	·1388					
5. 26	34. 5	11. 20	·1383					
5. 38	33. 45	12. 24	·1385					
5. 58	34. 30	12. 36	·1387					
6. 14	34. 0	12. 57	·1384					
6. 59	34. 0	13. 48	·1386					
7. 7	33. 40	15. 18	·1387					
9. 32	32. 50	16. 54	·1390					
9. 44	33. 10	17. 55	·1394					
9. 59	30. 50	18. 44	·1389					
10. 13	31. 20	18. 54	·1391					
10. 26	31. 5	18. 58	·1387					
10. 40	31. 50	21. 19	·1391					
10. 43	31. 30	22. 0	·1396					
10. 59	32. 10	22. 12	·1395					
11. 28	31. 30	22. 22	·1397					
11. 39	32. 25	22. 40	·1395					
11. 46	32. 25	22. 59	·1399					
11. 58	32. 0	23. 6	·1405					
12. 9	32. 30	23. 11	·1394					
12. 21	32. 10	23. 15	·1397					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct.29		Oct.29						
h m	° ′ ″	h m		h m		h m	°	°
12. 43	20. 32. 50	23. 23	·1395					
12. 56	32. 10	23. 42	·1400					
13. 21	33. 10	23. 59	·1402					
13. 53	33. 5							
14. 6	32. 15							
14. 28	32. 30							
14. 43	32. 15							
15. 44	33. 0							
15. 56	32. 30							
16. 11	32. 50							
16. 42	31. 30							
17. 6	32. 0							
17. 26	31. 15							
18. 11	31. 50							
18. 42	31. 50							
18. 57	31. 30							
19. 10	31. 15							
19. 14	31. 30							
19. 41	31. 20							
19. 56	31. 35							
20. 39	31. 20							
21. 23	31. 0							
21. 38	31. 20							
21. 42	30. 30							
22. 13	31. 50							
22. 29	33. 20							
22. 44	34. 0							
22. 59	37. 0							
23. 8	39. 40							
23. 14	34. 45							
23. 36	36. 10							
23. 59	36. 10							
Oct.30		Oct.30		Oct.30		Oct.30		
0. 0	20. 36. 10	0. 0	·1402	0. 0	·02636	1. 0	60 ·3	61 ·6
0. 27	37. 15	0. 22	·1406	2. 4	·02666	3. 0	60 ·1	61 ·7
0. 39	40. 30	0. 37	·1414	2. 59	·02729	Max.	60 ·3	61 ·8
0. 41	40. 50	0. 42	·1408	4. 5	·02730	9. 0	59 ·6	61 ·0
0. 44	39. 40	0. 51	·1412	4. 13	·02742	Min.	59 ·0	61 ·0
1. 8	40. 30	0. 58	·1408	5. 8	·02763	21. 0	59 ·6	61 ·0
1. 26	43. 5	1. 0	·1412	6. 1	·02881			
1. 30	42. 45	1. 25	·1419	6. 26	·02856			
1. 42	42. 40	1. 52	·1412	7. 24	·02786			
1. 55	44. 10	2. 10	·1374	8. 42	·02752			
2. 8	41. 10	2. 12	·1379	8. 56	·02742			
2. 11	43. 10	2. 15	·1363	9. 31	·02591			
2. 13	40. 50	2. 24	·1379	9. 39	·02639			
2. 26	46. 50	2. 35	·1370	9. 48	·02631			
2. 41	47. 10	2. 55	·1372	10. 6	·02681			
2. 46	48. 20	3. 15	·1364	10. 34	·02672			
2. 54	46. 10	3. 41	·1367	10. 51	·02702			
3. 9	44. 0	3. 49	·1360	12. 4	·02682			
3. 12	42. 15	4. 13	·1382	12. 15	·02668			
3. 38	43. 30	4. 26	·1393	12. 39	·02668			
3. 42	44. 50	4. 41	·1385	13. 4	·02637			
3. 54	43. 0	4. 53	·1394	13. 39	·02643			
3. 57	40. 40	4. 58	·1384	14. 1	·02640			
4. 9	40. 40	5. 6	·1386	14. 46	·02664			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Oct.30		Oct.30		Oct.30				
h m	° ′ ″	h m		h m		h m	°	°
4. 14	20. 42. 55	5. 15	·1372	18. 47	·02677			
4. 23	42. 55	5. 38	·1378		***			
4. 39	45. 30	5. 54	·1356	21. 18	·02671			
5. 0	45. 50	6. 13	·1324	21. 58	·02683			
5. 23	40. 20	6. 32	·1358		***			
5. 28	43. 10	6. 42	·1371	23. 59	·02701			
5. 43	35. 10	6. 54	·1365					
5. 54	36. 50	6. 59	·1366					
6. 14	21. 45	7. 15	·1363					
6. 45	30. 0	7. 24	·1365					
7. 0	27. 40	7. 34	·1360					
7. 13	28. 0	7. 56	·1371					
7. 24	30. 20	8. 14	·1372					
7. 28	30. 20	8. 26	·1378					
7. 44	28. 0	8. 40	·1375					
8. 13	26. 20	8. 49	·1364					
8. 23	28. 0	9. 0	·1357					
8. 26	28. 10	9. 8	·1377					
8. 36	31. 50	9. 12	·1360					
8. 41	30. 0	9. 22	·1352					
8. 54	31. 10	9. 26	·1361					
8. 59	38. 0	9. 36	·1346					
9. 3	38. 15	9. 42	·1315					
9. 12	43. 50	9. 55	·1375					
9. 16	40. 10	10. 0	·1366					
9. 26	43. 50	10. 23:	·1394					
9. 30	22. 0	10. 39	·1376					
9. 44	27. 10	10. 44	·1364					
9. 56	21. 20	10. 58	·1379					
10. 26	30. 5	11. 0	·1377					
10. 39	24. 0	11. 13	·1380					
10. 54	28. 0	11. 22	·1374					
10. 57	28. 0	11. 38	·1380					
11. 11	31. 0	11. 42	·1375					
11. 14	30. 45	11. 52	·1378					
11. 28	34. 30	12. 16	·1376					
11. 40	33. 30	12. 29	·1383					
11. 53	34. 5	12. 42	·1381					
11. 58	38. 10	12. 53	·1384					
12. 9	39. 30	13. 9	·1376					
12. 14	37. 40	13. 18	·1369					
12. 26	37. 10	13. 36	·1376					
12. 37	37. 0	13. 58	·1379					
12. 39	35. 35	14. 1	·1377					
12. 48	39. 45	14. 24	·1384					
13. 9	40. 0	14. 42	·1382					
13. 24	37. 0	14. 51	·1388					
13. 41	42. 0	14. 56	·1384					
13. 55	42. 40	15. 11	·1386					
14. 10	36. 40	15. 42	·1396					
14. 15	36. 45	16. 7	·1393					
14. 30	35. 25	16. 19	·1384					
14. 41	34. 5	16. 26	·1388					
14. 44	36. 5	16. 42	·1379					
14. 56	35. 55	16. 49	·1384					
15. 9	34. 20	17. 11	·1373					
15. 22	34. 10	17. 30	·1383					
15. 27	34. 50	17. 39	·1379					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Oct.30		Oct.30						
h m	° ′ ″	h m		h m		h m	°	°
15. 38	20. 36. 30	17. 42	·1382					
15. 41	36. 20	18. 0	·1374					
15. 53	34. 0	18. 11	·1377					
16. 9	34. 45	18. 20	·1374					
16. 20	32. 0	18. 35	·1377					
16. 26	32. 15	18. 49	·1387					
16. 30	33. 45	18. 57	·1382					
16. 39	31. 30	19. 15	·1392					
17. 0	33. 40	19. 28	·1382					
17. 11	32. 0	19. 40	·1388					
17. 27	36. 30	19. 42	·1382					
17. 36	35. 15	19. 53	·1388					
17. 39	35. 25	20. 30	·1386					
17. 44	34. 5	20. 53	·1379					
17. 55	34. 5	20. 57	·1381					
17. 59	33. 0	21. 11	·1370					
18. 23	34. 5	21. 16	·1353					
18. 25	33. 15	21. 24	·1344					
18. 29	33. 40	21. 31	·1350					
18. 44	36. 45	21. 42	·1341					
18. 53	34. 40		***					
19. 12	38. 15	22. 6	·1342					
19. 14	38. 15	22. 16	·1347					
19. 26	33. 15	22. 36	·1358					
19. 30	34. 50		***					
19. 37	31. 50	23. 12	·1356					
19. 41	32. 50	23. 20	·1365					
	***	23. 26	·1359					
20. 43	34. 15	23. 50	·1373					
20. 58	36. 10	23. 55	·1362					
21. 8	37. 20	23. 59	·1367					
21. 11	36. 55							
21. 30	36. 15							
21. 39	35. 0							
21. 55	39. 0							
21. 59	37. 40							
22. 9	39. 50							
22. 14	39. 50							
22. 25	39. 25							
22. 29	40. 30							
	***							
23. 9	39. 10							
23. 37	40. 30							
23. 42	43. 20							
23. 46	41. 10							
23. 55	44. 30							
23. 59	40. 0							
Oct.31		Oct.31		Oct.31		Oct.31		
0. 0	20. 40. 0	0. 0	·1367	0. 0	·02701	1. 0	59·1	61·0
0. 23	30. 15	0. 11	·1352	0. 54	·02768	3. 0	59·1	61·0
0. 26	32. 0	0. 13	·1356	1. 52	·02768	Max.	59·5	61·[illegible]
0. 43	37. 40	0. 17	·1336		***	9. 0	59·6	61·0
0. 54	36. 15	0. 25	·1347	2. 26:	·02843	Min.	58·0	60·0
1. 22	41. 35	0. 32	·1355		***	21. 0	58·8	60·0
1. 26	46. 10	0. 45	·1369	3. 8	·02774	22. 0	58·4	60·[illegible]
1. 41	43. 30	1. 0	·1375	3. 56	·02776	23. 0	58·7	60·1
1. 51	44. 30	1. 14	·1385	4. 4	·02778			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Oct. 31		Oct. 31		Oct. 31				
h m	° ′ ″	h m		h m		h m	°	°
1. 56	20. 43. 0	1. 28	·1369	4. 18	·02791			
1. 58	39. 0	1. 42	·1366	5. 8	·02749			
2. 9	42. 50	1. 55	·1348	5. 53	·02756			
2. 12	43. 0	2. 11	·1368	6. 7	·02773			
2. 25	35. 10	2. 17	·1365	7. 11	·02781			
2. 28	37. 50	2. 23	·1369	7. 24	·02762			
2. 37	30. 20	2. 25	·1379	7. 35	·02767			
2. 42	35. 0	2. 35	·1358	8. 8	·02663			
2. 46	36. 15	2. 42	·1378	9. 40	·02632			
2. 53	34. 10	2. 53	·1364	11. 38	·02692			
3. 10	40. 50	3. 5	·1379	12. 1	·02667			
3. 21	36. 15	3. 15	·1358	12. 43	·02660			
3. 26	37. 5	3. 26	·1367	13. 1	·02648			
3. 34	33. 30	3. 32	·1363	14. 30	·02633			
3. 41	29. 15	3. 42	·1361	15. 49	·02607			
3. 58	32. 50	3. 56	·1379	16. 44	·02613			
4. 6	29. 55	4. 11	·1362	17. 41	·02592			
4. 11	30. 0	4. 23	·1374	18. 9	·02610			
4. 23	32. 40	4. 30	·1368	18. 36	·02592			
4. 36	30. 5	4. 43	·1376	19. 8	·02623			
4. 41	32. 20	4. 59	·1384	20. 19	·02612			
4. 57	34. 40	5. 11	·1371	21. 25	·02656			
5. 3	34. 0	5. 25	·1380		***			
5. 9	32. 10	5. 51	·1366	22. 36	·02643			
5. 12	31. 40	5. 57	·1354	23. 9	·02646			
5. 23	31. 40	6. 11	·1367	23. 59	·02696			
5. 29	32. 10	6. 13	·1366					
5. 38	29. 0	6. 24	·1374					
5. 40	28. 10	6. 41	·1365					
5. 45	28. 40	6. 44	·1368					
5. 56	22. 0	6. 53	·1363					
6. 8	23. 40	6. 58	·1366					
6. 10	21. 40	7. 14	·1346					
6. 14	26. 0	7. 19	·1349					
6. 26	26. 0	7. 24	·1336					
6. 37	22. 15	7. 44	·1433					
6. 42	21. 20	7. 52	·1444					
6. 59	25. 30	8. 11	·1374					
7. 14	20. 16. 30	8. 19	·1386					
7. 28	19. 56. 20	8. 25	·1378					
7. 40	20. 10. 0	8. 45	·1387					
7. 52	30. 0	8. 54	·1373					
7. 54	33. 0	8. 58	·1376					
7. 57	34. 45	9. 6	·1369					
8. 7	24. 40	9. 11	·1372					
8. 13	25. 40	9. 17	·1368					
8. 23	18. 0	9. 25	·1372					
8. 40	24. 40	9. 40	·1362					
8. 43	22. 35	9. 52	·1374					
8. 54	22. 35	9. 54	·1373					
9. 10	24. 0	10. 0	·1373					
9. 24	28. 5	10. 14	·1370					
9. 27	27. 50	10. 26	·1377					
9. 41	29. 20	10. 41	·1372					
9. 44	28. 30	10. 51	·1374					
9. 57	27. 20	11. 0	·1379					
10. 7	26. 0	11. 15	·1376					
10. 26	24. 50	11. 24	·1378					
Oct. 31		Oct. 31						
h m	° ′ ″	h m		h m		h m	°	°
10. 57	20. 28. 0	11. 41	·1373					
11. 6	29. 30	11. 54	·1394					
11. 9	29. 20	12. 12	·1383					
11. 26	34. 40	12. 41	·1381					
11. 32	34. 15	13. 4	·1389					
12. 6	35. 50	13. 20	·1379					
12. 23	34. 15	13. 41	·1386					
12. 26	34. 25	14. 5	·1383					
12. 28	34. 5	14. 26	·1386					
12. 37	35. 30	14. 56	·1388					
12. 41	34. 15	15. 26:	·1360					
13. 8	39. 30	15. 43	·1374					
13. 20	38. 10	16. 24	·1382					
13. 25	36. 50	17. 0	·1414					
13. 32	36. 5	17. 11	·1411					
13. 42	37. 20	17. 19	·1415					
13. 56	37. 30	17. 40	·1394					
14. 14	35. 10	17. 56	·1378					
14. 23	35. 40	18. 13	·1380					
14. 51	34. 0	18. 29	·1359					
15. 11	37. 0	18. 40	·1367					
15. 26	42. 20	18. 44	·1360					
15. 37	41. 50	18. 57	·1367					
15. 43	43. 50	19. 3	·1367					
15. 55	43. 20	19. 10	·1364					
16. 12	40. 35	19. 15	·1373					
16. 26	38. 55	19. 19	·1368					
16. 55	39. 20	19. 31	·1371					
17. 10	41. 0	19. 45	·1385					
17. 37	46. 50	20. 23	·1364					
17. 40	45. 25		***					
17. 44	42. 0	20. 41	·1361					
17. 53	42. 35	20. 45	·1363					
17. 58	42. 0	20. 48	·1361					
18. 11	45. 30	20. 56	·1366					
18. 26	47. 0	21. 14	·1362					
18. 38	43. 30	21. 36	·1378					
18. 43	38. 40	21. 40	·1375					
18. 55	39. 30		***					
19. 9	38. 0	21. 56	·1384					
19. 16	45. 40	22. 11	·1378					
19. 38	43. 20	22. 30	·1391					
19. 51	47. 0	22. 45	·1379					
20. 3	47. 40	22. 59	·1363					
20. 29	44. 30	23. 19	·1344					
20. 40	42. 20	23. 27	·1322					
20. 42	43. 40	23. 34	·1325					
20. 56	43. 20	23. 44	·1321					
20. 59	41. 30	23. 52	·1335					
21. 24	36. 40	23. 55	·1332					
21. 33	40. 0	23. 59	·1338					
21. 38	38. 20							
	***							
22. 10	38. 20							
22. 14	37. 30							
22. 24	37. 15							
22. 36	42. 0							
22. 43	43. 20							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Oct. 31									Nov. 1		Nov. 1						
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′	h m		h m		h m	°	°
23. 9	20. 42. 30								7. 26	20. 32. 40	8. 41	·1374					
23. 16	42. 50								7. 37	22. 50	8. 50	·1383					
23. 26	46. 10								7. 41	22. 50	8. 59	·1372					
23. 29	44. 30								7. 56	17. 10	9. 10	·1376					
23. 39	44. 30								8. 11	23. 5	9. 13	·1373					
23. 43	41. 55								8. 26	28. 50	9. 28	·1382					
23. 52	43. 20								8. 41	23. 30	9. 33	·1382					
23. 59	43. 10								8. 56	27. 30	9. 41	·1412					
									9. 6	26. 55	10. 4	·1392					
Nov. 1		Nov. 1		Nov. 1		Nov. 1			9. 11	27. 50	10. 21	·1406					
0. 0	20. 43. 10	0. 0	·1338	0. 0	·02696	0. 0	58·8	60·1	9. 12	27. 50	10. 40	·1386					
0. 9	45. 0	0. 11	·1334	2. 25	·02738	1. 0	58·9	60·2	9. 32	31. 45	10. 47	·1399					
0. 14	43. 30	0. 19	·1327	2. 41	·02756	2. 0	58·9	60·3	9. 36	32. 0	10. 56	·1399					
0. 22	41. 15	0. 26	·1335	3. 6	·02819	3. 0	58·9	60·6	9. 58	39. 30	11. 11	·1386					
0. 28	42. 40	0. 34	·1353	3. 27	·02757	Max.	59·0	61·7	10. 8	38. 30	11. 24	·1393					
0. 39	44. 30	0. 51	·1369	4. 14	·02764	9. 0	58·8	59·5	10. 12	34. 15	11. 40	·1396					
0. 44	45. 40	0. 55	·1365	4. 39	·02738	Min.	56·3	57·0	10. 27	42. 10	11. 54	·1390					
0. 55	45. 15	1. 7	·1368	5. 4	·02728	21. 0	56·3	57·0	10. 41	36. 10	11. 58	·1393					
0. 57	46. 50	1. 12	·1362	5. 19	·02736	22. 0	56·5	57·4	10. 56	37. 50	12. 11	·1384					
0. 58	45. 5	1. 32	·1364	5. 56	·02677	23. 0	56·4	57·4	11. 11	31. 0	12. 20	·1386					
1. 11	45. 30	1. 38	·1369	7. 3	·02676				11. 15	31. 20	12. 25	·1383					
1. 15	43. 55	1. 45	·1367	7. 13	·02684				11. 25	31. 0	12. 40	·1387					
1. 39	44. 15	2. 0	·1380	7. 35	·02638				11. 30	32. 0	12. 53	·1380					
1. 42	43. 55	2. 11	·1377	7. 56	·02646				11. 42	32. 15	13. 0	·1383					
2. 0	40. 50	2. 24	·1385	8. 9	·02658				11. 53	31. 40	13. 12	·1380					
2. 7	39. 50	2. 29	·1385	9. 5	·02636				11. 59	34. 0	13. 25	·1386					
2. 11	40. 10	2. 40	·1398	9. 49	·02634				12. 9	33. 40	13. 34	·1385					
2. 39	40. 0	2. 44	·1391	10. 13	·02591				12. 26	33. 50	13. 51	·1390					
2. 50	43. 50	2. 55	·1397	10. 26	·02588				12. 51	35. 0	14. 10	·1386					
2. 54	39. 10	2. 57	·1393	10. 45	·02550				12. 59	39. 0	14. 19	·1392					
2. 57	29. 5	3. 13	·1417	10. 55	·02550				13. 9	41. 10	14. 30	·1394					
3. 6	24. 40	3. 21	·1380	11. 8	·02536				13. 23	38. 50	14. 39	·1390					
3. 12	33. 50	3. 25	·1395	12. 50	·02583				13. 30	38. 50	14. 41	·1392					
3. 23	26. 15	3. 36	·1367	13. 33	·02562				13. 39	37. 10	14. 55	·1384					
3. 27	32. 50	3. 43	·1382	14. 14	·02566				13. 44	37. 10	15. 16	·1386					
3. 39	27. 0	3. 48	·1381	14. 54	·02532				13. 56	37. 40	15. 29	·1390					
3. 58	39. 5	4. 0	·1345	15. 33	·02541				14. 9	37. 10	15. 44	·1381					
4. 8	31. 0	4. 22	·1367	15. 51	·02529				14. 23	40. 10	15. 55	·1384					
4. 20	35. 50	4. 40	·1360	17. 2	·02536				14. 40	36. 40	16. 1	·1382					
4. 27	36. 15	4. 44	·1365	18. 0	·02511				14. 43	36. 30	16. 12	·1387					
4. 39	31. 50	4. 51	·1358	18. 18	·02529				14. 59	33. 20	16. 19	·1385					
4. 42	31. 50	5. 0	·1360	18. 41	·02524				15. 9	34. 15	16. 25	·1389					
4. 50	28. 10	5. 9	·1353	18. 54	·02536				15. 14	34. 5	16. 37	·1387					
4. 56	28. 5	5. 24	·1398	19. 26	·02517				15. 24	35. 5	16. 56	·1400					
5. 2	25. 0	5. 35	·1407	20. 53	·02506				15. 38	37. 20	17. 10	·1409					
5. 9	11. 20	5. 45	·1395	23. 59	·02496				15. 53	36. 10	17. 12	·1406					
5. 14	16. 0	6. 3	·1377						15. 59	37. 30	17. 21	·1409					
5. 34	25. 55	6. 25	·1380						16. 11	36. 45	18. 12	·1372					
5. 54	34. 20	6. 47	·1362						16. 14	37. 50	18. 26	·1382					
5. 59	33. 45	6. 59	·1363						16. 26	37. 15	18. 40	·1387					
6. 7	33. 45	7. 12	·1402						16. 31	37. 45	18. 44	·1383					
6. 14	34. 40	7. 18	·1405						16. 42	36. 30	19. 10	·1398					
6. 38	32. 40	7. 36	·1378						16. 54	36. 50	19. 26	·1392					
6. 43	32. 50	7. 41	·1385						16. 57	38. 50	19. 43	·1366					
6. 54	31. 10	7. 54	·1370						16. 59	37. 20	20. 4	·1365					
7. 1	20. 40	8. 0	·1381						17. 4	36. 50	20. 19	·1392					
7. 8	26. 30	8. 16	·1391						17. 9	37. 40	20. 52	·1362					
7. 19	33. 0	8. 30	·1387						17. 14	37. 0	21. 5	·1366					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 1		Nov. 1						
h m	° ′ ″	h m		h m		h m	°	°
17. 38	20. 39. 20	21. 23	·1348					
17. 40	40. 10	21. 52	·1346					
17. 43	39. 30	22. 4	·1356					
17. 53	39. 30	22. 11	·1349					
17. 58	38. 40	22. 23	·1359					
18. 6	38. 40	22. 41	·1378					
18. 13	36. 15	22. 59	·1384					
18. 26	37. 30	23. 11	·1383					
18. 34	36. 5	23. 22	·1387					
18. 51	36. 0		***					
18. 55	38. 15	23. 47	·1386					
18. 57	37. 40	23. 54	·1380					
19. 11	37. 40	23. 59	·1380					
19. 29	34. 45							
19. 56	36. 0							
20. 9	37. 25							
20. 14	37. 5							
20. 23	37. 15							
20. 39	37. 0							
20. 53	35. 20							
20. 59	36. 30							
21. 17	39. 20							
21. 26	38. 50							
21. 42	41. 15							
21. 51	41. 15							
21. 57	43. 20							
22. 0	43. 20							
22. 9	44. 40							
22. 12	42. 0							
22. 36	38. 40							
	***							
23. 38	42. 10							
23. 56	41. 15							
23. 58	42. 0							
23. 59	43. 40							
Nov. 2		Nov. 2		Nov. 2		Nov. 2		
0. 0	20. 43. 40	0. 0	·1380	0. 0	·02496	0. 0	56 ·5	57 ·5
0. 12	42. 20	0. 6	·1385	2. 4	·02556	Min.	56 ·5	57 ·5
0. 21	42. 10	0. 11	·1379	2. 40	·02610	1. 0	58 ·3	58 ·4
0. 23	41. 0	0. 15	·1387	3. 27	·02631	3. 0	58 ·2	58 ·5
0. 27	40. 0	0. 26	·1390	3. 52	·02686	9. 0	58 ·4	59 ·5
0. 43	40. 0	0. 41	·1388	4. 20	·02640	Max.	58 ·8	60 ·2
1. 13	42. 30	0. 52	·1391	5. 24	·02606	21. 0	58 ·8	59 ·0
1. 26	41. 55	0. 57	·1390	5. 31	·02617			
1. 42	45. 25	1. 12	·1399	6. 4	·02582			
1. 56	39. 55	1. 20	·1393	8. 9	·02579			
2. 4	40. 20	1. 41	·1393	8. 31	·02552			
2. 13	44. 20	1. 50	·1375	15. 5	·02603			
2. 18	40. 50	2. 11	·1397	15. 45	·02584			
2. 24	40. 20	2. 15	·1388	16. 18	·02589			
2. 31	36. 50	2. 23	·1398	16. 54	·02571			
2. 42	40. 5	2. 33	·1391	20. 26	·02588			
2. 44	38. 0	2. 41	·1395	22. 36	·02595			
2. 46	38. 10	2. 43	·1389	22. 44	·02611			
2. 53	33. 0	2. 45	·1393	23. 59	·02609			
2. 57	32. 10	2. 53	·1384					
3. 6	36. 10	3. 10	·1391					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 2		Nov. 2						
h m	° ′ ″	h m		h m		h m	°	°
3. 14	20. 33. 10	3. 19	·1385					
3. 28	40. 0	3. 26	·1389					
3. 56	16. 15	3. 40	·1358					
4. 6	20. 0	3. 52	·1372					
4. 25	25. 0	4. 1	·1395					
4. 43	28. 50	4. 24	·1379					
4. 51	28. 50	4. 49	·1373					
5. 0	31. 20	4. 56	·1375					
5. 7	33. 50	5. 0	·1373					
5. 11	33. 5	5. 7	·1378					
5. 18	36. 10	5. 12	·1376					
5. 27	25. 15	5. 19	·1384					
5. 41	35. 0	5. 25	·1367					
5. 51	33. 25	5. 40	·1401					
5. 56	34. 35	5. 49	·1386					
6. 8	35. 5	5. 55	·1389					
6. 15	32. 0	6. 11	·1386					
6. 28	33. 40	6. 15	·1378					
6. 39	35. 30	6. 25	·1381					
	***	6. 41	·1387					
6. 59	35. 30	6. 44	·1385					
7. 9	35. 5	7. 4	·1389					
7. 20	31. 40	7. 15	·1383					
7. 28	34. 30	7. 26	·1390					
7. 42	30. 40	7. 41	·1387					
8. 2	30. 30	7. 54	·1401					
8. 13	36. 25	8. 5	·1409					
8. 25	36. 40	8. 11	·1420					
8. 41	31. 30	8. 38	·1388					
8. 57	33. 0	8. 57	·1394					
9. 11	32. 45	9. 10	·1391					
9. 16	33. 30	9. 17	·1393					
9. 24	33. 30	9. 52	·1388					
9. 38	34. 20	10. 56	·1391					
10. 9	34. 0	11. 12	·1387					
10. 28	34. 0	11. 22	·1390					
10. 51	33. 25	12. 0	·1387					
11. 12	34. 5	14. 34	·1393					
11. 38	34. 5	15. 10	·1387					
11. 51	33. 30	15. 41	·1393					
13. 17	34. 0	16. 8	·1388					
14. 30	33. 15	16. 34	·1397					
14. 43	32. 0	16. 57	·1407					
14. 58	33. 45	17. 19	·1405					
15. 14	39. 15	17. 27	·1407					
15. 38	36. 30	18. 27	·1396					
15. 43	34. 40	19. 30	·1390					
16. 11	41. 10	19. 41	·1393					
16. 22	41. 40	19. 55	·1387					
16. 29	41. 15	20. 11	·1388					
16. 57	37. 0	21. 0	·1379					
17. 11	35. 50	21. 54	·1376					
17. 30	35. 30	22. 18	·1368					
17. 40	34. 40	22. 40	·1363					
17. 58	35. 10	22. 49	·1353					
18. 13	34. 20	23. 0	·1368					
18. 25	34. 55	23. 38	·1374					
18. 36	34. 20	23. 59	·1385					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 2								
h m	° ′ ″	h m		h m		h m	°	°
18. 39	20. 35. 5							
19. 13	33. 20							
19. 22	34. 20							
19. 26	33. 45							
19. 34	33. 45							
19. 41	34. 45							
19. 45	34. 45							
20. 0	34. 10							
20. 17	34. 0							
20. 28	35. 40							
20. 34	34. 15							
20. 41	33. 50							
20. 45	35. 10							
20. 56	33. 40							
21. 8	34. 0							
21. 10	33. 20							
21. 41	35. 0							
21. 47	34. 45							
22. 0	37. 50							
22. 4	36. 30							
22. 41	37. 50							
22. 44	38. 40							
22. 54	36. 0							
22. 57	35. 20							
23. 9	37. 10							
23. 28	36. 30							
23. 42	35. 10							
23. 59	35. 30							
Nov. 3		Nov. 3		Nov. 3		Nov. 3		
0. 0	20. 35. 30	0. 0	·1385	0. 0	·02609	1. 0	59 ·2	61 ·4
0. 14	35. 30	0. 21	·1388	1. 13	·02617	3. 0	59 ·2	61 ·5
0. 26	39. 55	0. 41	·1387	2. 1	·02656	Max.	59 ·7	61 ·8
0. 58	39. 40	0. 55	·1390	6. 2	·02701	9. 0	59 ·6	61 ·8
1. 8	40. 15	1. 12	·1386	8. 46	·02673	Min.	57 ·0	57 ·8
1. 12	39. 5	1. 24	·1380	9. 21:	·02630	21. 0	57 ·3	58 ·0
1. 22	39. 5	1. 42	·1374	9. 36	·02588			
1. 43	34. 30	2. 0	·1384	10. 23	·02629			
2. 9	38. 50	2. 11	·1377	10. 31	·02617			
2. 13	38. 10	2. 19	·1381	10. 53	·02635			
2. 26	38. 5	2. 26	·1377	12. 4	·02635			
2. 30	38. 20	2. 33	·1380	12. 41	·02583			
2. 42	34. 25	2. 41	·1374	14. 7:	·02616			
2. 52	35. 40	2. 50	·1380	15. 9	·02608			
2. 58	33. 55	3. 4	·1368	15. 53	·02617			
3. 9	33. 55	3. 14	·1366	23. 17	·02565			
3. 21	29. 25	3. 19	·1360	23. 59	·c2571			
3. 28	32. 0	3. 41	·1382					
3. 51	33. 30	3. 53	·1388					
3. 57	33. 30	4. 7	·1387					
4. 3	34. 30	4. 26	·1362					
4. 13	34. 45	4. 54	·1383					
4. 26	32. 0	5. 10	·1352					
4. 42	30. 20	5. 23	·1368					
4. 55	31. 30	5. 26	·1367					
5. 14	19. 0	5. 41	·1392					
5. 26	8. 50	5. 53	·1382					
5. 41	14. 20	5. 56	·1384					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 3		Nov. 3						
h m	° ′ ″	h m		h m		h m	°	°
5. 44	20. 14. 20	6. 11	·1376					
6. 10	21. 15	6. 25	·1387					
6. 20	20. 45	6. 49	·1379					
6. 40	28. 30	7. 0	·1385					
6. 55	30. 40	7. 25	·1378					
7. 9	33. 10	7. 45	·1387					
7. 26	32. 20	7. 57	·1389					
7. 47	33. 20	8. 4	·1387					
8. 12	31. 30	8. 12	·1389					
8. 29	31. 30	8. 37	·1384					
8. 43	28. 30	8. 57	·1405					
8. 57	28. 50	9. 12	·1399					
9. 14	32. 10	9. 22	·1433					
9. 26	38. 50	9. 39	·1387					
9. 37	27. 10	9. 42	·1393					
9. 43	28. 0	9. 47	·1383					
9. 53	26. 10	9. 56	·1384					
10. 7	26. 30	10. 4	·1378					
10. 9	26. 5	10. 19	·1384					
10. 25	29. 15	10. 40	·1370					
10. 41:	25. 55	10. 54	·1379					
10. 55	28. 5	11. 12	·1374					
11. 8	27. 0	11. 39	·1378					
11. 18	26. 15	11. 42	·1376					
11. 37	27. 50	11. 56	·1378					
11. 41	27. 50	12. 13	·1396					
11. 56	31. 15	12. 18	·1394					
12. 12	36. 50	12. 25	·1397					
12. 29	39. 5	12. 41	·1382					
12. 55	34. 30	13. 6	·1381					
13. 8	34. 30	13. 23	·1387					
13. 15	32. 0	13. 45	·1383					
13. 42	34. 55	14. 42	·1398					
13. 47	35. 0	15. 24	·1379					
13. 58	35. 40	16. 6	·1386					
14. 40	34. 10	16. 45	·1398					
14. 54	34. 30	16. 49	·1392					
15. 8	33. 0	16. 54	·1397					
15. 26	34. 20	17. 23	·1398					
15. 29	34. 10	17. 27	·1394					
15. 39	35. 20	17. 35	·1397					
15. 51	36. 0	17. 39	·1393					
16. 0	36. 0	18. 19	·1391					
16. 11	35. 5	18. 35	·1386					
16. 23	35. 30	18. 56	·1392					
16. 36	34. 20	19. 10	·1385					
16. 40	34. 20	19. 27	·1393					
16. 43	35. 45	19. 42	·1392					
16. 52	33. 15	19. 54	·1394					
16. 59	33. 40	20. 30	·1384					
17. 8	33. 20	20. 41	·1386					
17. 13	34. 40	20. 57	·1375					
17. 25	34. 20	22. 8	·1370					
17. 29	34. 45	22. 25	·1376					
17. 39	36. 5	22. 38	·1374					
18. 3	37. 20	23. 9	·1376					
18. 21	40. 40	23. 25	·1372					
18. 44	40. 10	23. 39	·1376					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 3		Nov. 3						
h m	° ′ ″	h m		h m		h m	°	°
18. 58	20. 39. 30	23. 53	·1366					
19. 10	40. 0	23. 59	·1371					
19. 28	38. 0							
19. 40	38. 20							
19. 57	36. 25							
20. 13	37. 25							
20. 31	36. 0							
20. 44	34. 30							
20. 55	34. 30							
20. 59	33. 50							
21. 14	34. 45							
21. 28	34. 45							
21. 38	33. 50							
21. 44	35. 15							
21. 59	36. 55							
22. 9	35. 40							
22. 37	39. 15							
	***							
23. 23	38. 0							
23. 53	38. 45							
23. 59	36. 20							
Nov. 4		Nov. 4		Nov. 4		Nov. 4		
0. 0	20. 36. 20	0. 0	·1371	0. 0	·02571	1. 0	57 ·8	59 ·0
0. 11	36. 5	0. 20	·1386	3. 1	·02607	3. 0	58 ·5	60 ·0
0. 24	35. 0	0. 37	·1390	4. 38:	·02642	Max.	59 ·6	61 ·7
0. 59	36. 0	0. 48	·1393	5. 11	·02625	9. 0	58 ·8	60 ·1
1. 7	37. 30		(†)	5. 46	·02664	Min.	56 ·8	57 ·7
2. 11	36 10	1. 0	·1392*	7. 28	·02652	22. 0	56 ·8	57 ·7
	***	1. 10	·1396	7. 36	·02654			
3. 9	33. 25	1. 15	·1392	7. 53	·02629			
3. 13	31. 30	1. 45	·1393	9. 41	·02616			
3. 26	31. 30	2. 16	·1398	9. 59	·02607			
3. 42	31. 45	2. 26	·1397	10. 17	·02616			
3. 56	28. 50	2. 42	·1391	10. 36	·02605			
4. 13	29. 50	3. 4	·1394	12. 46	·02615			
4. 18	30. 50	3. 16	·1391	13. 54	·02595			
4. 25	30. 55	3. 44	·1381	14. 52:	·02549			
4. 44	34. 30	4. 12	·1384	15. 23	·02567			
4. 55	33. 50	4. 31	·1392	16. 9	·02556			
5. 5	33. 5	4. 56	·1388	18. 7	·02543			
5. 27	16. 50	5. 14	·1356	23. 59	·02552			
6. 0	28. 30	5. 43	·1386					
6. 7	28. 40	6. 4	·1397					
6. 13	31. 30	6. 13	·1390					
6. 28	33. 10	6. 27	·1383					
6. 45	32. 10	7. 9	·1388					
7. 13	33. 20	7. 19	·1384					
7. 24	32. 0	7. 42	·1414					
7. 27	28. 25	7. 54	·1408					
7. 40	31. 50	8. 4	·1416					
7. 53	28. 0	8. 40	·1387					
8. 9	29. 55	8. 54	·1391					
8. 20	30. 20	9. 11	·1378					
8. 29	28. 0	9. 24	·1384					
8. 57	28. 15	9. 35	·1392					
9. 11	25. 0	9. 57	·1363					
9. 26	25. 10	10. 11	·1373					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 4		Nov. 4						
h m	° ′ ″	h m		h m		h m	°	°
9. 30	20. 26. 25	10. 18	·1386					
9. 39	26. 35	10. 35	·1379					
9. 44	28. 50	10. 44	·1385					
9. 59	22. 20	11. 6	·1388					
10. 16	31. 30	11. 24	·1383					
10. 25	31. 30	12. 9	·1386					
10. 29	30. 0	12. 32	·1385					
11. 6	33. 0	12. 54	·1393					
11. 12	30. 55	13. 12:	·1388					
11. 17	31. 0	13. 32	·1392					
11. 39	29. 10	13. 36	·1390					
12. 8	29. 40	13. 53	·1395					
12. 32	31. 5	14. 11	·1411					
12. 43	34. 0	14. 23	·1412					
13. 11	31. 10	14. 46	·1398					
14. 14	39. 40	15. 10	·1392					
14. 40	33. 5	15. 14	·1393					
14. 53	31. 15	15. 53	·1409					
14. 58	31. 10	16. 10	·1402					
15. 10	33. 15	16. 19	·1403					
15. 38	32. 5	16. 30	·1399					
15. 53	32. 15	17. 11	·1409					
16. 0	31. 10	17. 44	·1406					
16. 14	33. 15	18. 19	·1392					
16. 28	33. 20	18. 50	·1396					
16. 41	32. 30	19. 20	·1392					
	***	19. 41	·1381					
17. 14	33. 30	20. 26	·1389					
17. 26	33. 30	20. 42	·1383					
17. 50	37. 20		(†)					
18. 11	34. 10	22. 0	·1373*					
18. 23	34. 25	22. 14	·1378					
18. 27	33. 35		***					
18. 39	33. 0	22. 52	·1370					
18. 45	33. 20	22. 54	·1363					
18. 55	32. 10	23. 11	·1370					
19. 14	33. 0	23. 48	·1377					
19. 26	31. 45	23. 59	·1385					
19. 36	32. 25							
19. 42	31. 45							
19. 54	33. 10							
19. 57	33. 10							
20. 8	34. 45							
20. 26	34. 35							
20. 29	33. 15							
20. 38	35. 15							
20. 45	33. 0							
	***							
21. 7	34. 20							
21. 32	33. 0							
21. 41	33. 20							
21. 44	32. 45							
22. 11	34. 35							
22. 24	33. 30							
22. 40	36. 10							
22. 42	34. 0							
22. 44	34. 40							
22. 53	33. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Nov. 4									Nov. 5		Nov. 5						
h m	° ′ ″	h m		h m		h m		°	h m	° ′ ″	h m		h m		h m	°	°
22. 57	20. 33. 50								9. 12	20. 26. 5	13. 27	·1400					
23. 5	33. 0								9. 23	25. 30	13. 40	·1396					
23. 12	33. 50								9. 43	27. 0	14. 12	·1397					
23. 23	35. 10								10. 0	23. 0	14. 29	·1391					
23. 44	34. 0								10. 22	25. 0	14. 39	·1394					
23. 58	35. 20								10. 40	29. 0	14. 55	·1390					
23. 59	37. 15								10. 57	30. 5	15. 41	·1401					
									11. 12	29. 10	15. 50	·1400					
Nov. 5		Nov. 5		Nov. 5		Nov. 5			11. 28	30. 0	16. 11	·1402					
0. 0	20. 37. 15	0. 0	·1385	0. 0	·02552	1. 0	57·6	58·3	11. 43	33. 10	16. 20	·1399					
0. 11	36. 40	0. 18	·1388	0. 55	·02564	Max.	58·7	60·0	12. 20	33. 0	16. 29	·1401					
0. 28	38. 30	0. 29	·1390	2. 46	·02635	9. 0	58·6	60·0	12. 36	35. 5	16. 43	·1398					
0. 37	38. 15	0. 43	·1382	2. 57	·02630	Min.	56·3	57·5	12. 42	34. 15	16. 54	·1400					
0. 43	41. 10	0. 45	·1366	3. 11	·02643	21. 0	56·8	57·6	13. 0	38. 0		* * *					
0. 52	37. 0	0. 56	·1379	6. 30	·02610				13. 27	36. 0	17. 45	·1403					
0. 57	36. 30	1. 11	·1367	6. 52	·02621				13. 54	32. 40	17. 54	·1399					
1. 21	31. 0	1. 25	·1377	8. 4	·02610				13. 58	33. 0	18. 5	·1403					
1. 27	32. 15	1. 39	·1371	8. 25	·02616				14. 10	31. 50	18. 56	·1406					
1. 29	32. 15	1. 58	·1384	8. 39	·02609				14. 14	33. 10	19. 27	·1404					
1. 40	34. 0	2. 19	·1378	9. 2	·02622				14. 26	32. 25	19. 50	·1393					
1. 54	35. 5	2. 27	·1367	10. 0	·02583				14. 58	37. 50	20. 11	·1387					
2. 8	37. 50	2. 44	·1379	11. 56	·02576				15. 14	38. 10	20. 23	·1390					
2. 14	40. 20	3. 0	·1370	14. 9	·02544				15. 28	35. 50	20. 27	·1388					
2. 23	40. 5	3. 19	·1382	15. 8	·02551				15. 40	35. 0	20. 41	·1393					
2. 39	36. 10	3. 35	·1378	16. 25	·02537				15. 46	33. 50	20. 48	·1392					
2. 54	38. 5	3. 49	·1386	22. 36	·02502				16. 13	32. 15	21. 11	·1396					
2. 58	35. 0	4. 10	·1383	23. 59	·02500				16. 26	33. 0	21. 54	·1392					
3. 18	37. 30	4. 41	·1393						16. 41	31. 55	22. 12	·1387					
3. 28	37. 40	4. 49	·1389						16. 45	32. 40	22. 25	·1388					
3. 38	36. 20	4. 56	·1394						17. 13	33. 0	22. 40	·1397					
3. 44	35. 50	5. 10	·1392						17. 37	32. 20	22. 45	·1388					
3. 57	36. 0	5. 40	·1397						17. 43	32. 55	23. 3	·1390					
4. 9	35. 5	6. 26	·1385						17. 50	31. 40	23. 15	·1387					
4. 14	36. 10	6. 51	·1396						17. 56	31. 40	23. 30	·1395					
4. 26	34. 40	7. 6	·1393						18. 0	32. 40	23. 45	·1389					
4. 44	35. 10	7. 15	·1397						18. 39	31. 50	23. 59	·1393					
5. 3	34. 40	7. 27	·1397						18. 54	32. 15							
5. 11	33. 30	7. 50	·1389						19. 9	31. 25							
5. 26	34. 25	8. 5	·1382						19. 27	33. 0							
5. 37	34. 0	8. 20	·1386						20. 3	35. 0							
5. 56	34. 55	8. 36	·1377						20. 9	34. 15							
6. 0	34. 25	8. 48	·1388						20. 24	34. 40							
6. 11	34. 25	8. 56	·1417						20. 28	33. 30							
6. 23	33. 10	9. 14	·1403						20. 42	33. 30							
6. 30	29. 30	9. 29	·1408						20. 57	31. 55							
6. 41	29. 40	9. 44	·1400						21. 27	33. 30							
6. 56	32. 30	9. 59	·1386						21. 39	32. 50							
7. 13	32. 25	10. 25	·1387						22. 16	32. 30							
7. 23	31. 50	10. 40	·1390						22. 29	33. 20							
7. 26	32. 20	11. 22	·1382						22. 36	32. 25							
7. 31	31. 30	11. 40	·1387						22. 42	35. 40							
7. 51	32. 50	11. 42	·1385						22. 53	34. 0							
7. 56	32. 0	12. 20	·1393						22. 56	34. 0							
8. 0	30. 55	12. 28	·1389						22. 58	33. 30							
8. 25	30. 25	12. 44	·1391						23. 8	33. 30							
8. 43	19. 0	12. 54	·1396						23. 11	34. 0							
8. 56	18. 0	13. 5	·1392						23. 23	33. 40							
9. 0	21. 40	13. 25	·1398						23. 29	36. 50							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Nov. 5	
h m	° ' "
23. 43	20. 37. 10
23. 56	36. 30
23. 59	38. 50
Nov. 6	
0. 0	20. 38. 50
0. 23	36. 55
0. 27	38. 15
0. 40	39. 5
0. 42	38. 0
0. 58	37. 30
1. 11	38. 0
1. 13	39. 0
1. 37	39. 15
1. 41	40. 20
2. 7	39. 40
2. 14	40. 50
2. 35	38. 30
2. 44	37. 15
2. 57	38. 5
3. 5	37. 0
3. 23	37. 0
3. 39	36. 20
3. 41	32. 0
3. 52	28. 45
4. 0	32. 10
4. 11	31. 15
4. 22	31. 40
4. 26	28. 0
4. 41	31. 10
4. 58	33. 30
5. 23	34. 40
5. 32	34. 10
5. 45	34. 30
6. 9	33. 30
6. 39	33. 45
6. 43	33. 20
6. 56	33. 20
7. 7	30. 5
7. 13	31. 40
7. 23	31. 0
7. 30	31. 0
7. 42	28. 20
7. 53	28. 30
7. 59	30. 0
8. 8	30. 30
8. 15	29. 30
8. 32	31. 40
8. 53	19. 0
9. 0	22. 0
9. 12	22. 0
9. 22	23. 10
9. 42	25. 40
9. 51	28. 0
10. 3	30. 40
10. 25	24. 0
10. 51	27. 0
10. 59	28. 55

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Nov. 6	
0. 0	·1393
0. 18	·1381
0. 25	·1382
0. 42	·1386
1. 10	·1375
1. 26	·1377
1. 41	·1383
1. 49	·1381
1. 58	·1387
2. 13	·1391
2. 41	·1378
2. 57	·1388
3. 24	·1379
3. 39	·1380
3. 45	·1375
4. 0	·1396
4. 7	·1390
4. 14	·1391
4. 23	·1384
4. 35	·1400
4. 53	·1404
5. 30	·1395
6. 1	·1400
6. 26	·1395
6. 53	·1398
7. 4	·1390
7. 10	·1394
7. 15	·1394
7. 26	·1402
7. 42	·1394
7. 55	·1399
8. 12	·1392
8. 24	·1399
8. 27	·1394
8. 39	·1401
8. 43	·1398
8. 52	·1401
9. 0	·1423
9. 14	·1417
9. 24	·1435
9. 50	·1414
9. 56	·1415
10. 12	·1400
10. 25	·1386
10. 53:	·1409
11. 30	·1385
12. 8	·1391
12. 22	·1384
12. 38	·1386
12. 42	·1383
13. 10	·1384
13. 19	·1381
13. 37	·1386

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Nov. 6	
0. 0	·02500
1. 9	·02501
2. 10	·02552
2. 34	·02547
2. 54	·02573
3. 39	·02582
3. 56	·02598
4. 23	·02582
4. 36	·02591
5. 34	·02573
6. 58	·02576
8. 34	·02589
8. 53	·02570
8. 59	·02576
10. 23	·02541
10. 34	·02551
12. 55	·02562
13. 18	·02544
14. 0	·02542
16. 14:	·02601
19. 39	·02608
22. 11	·02581
23. 59	·02603

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov. 6		
Min.	57 ·3	58 ·1
1. 0	57 ·5	58 ·2
3. 0	57 ·8	58 ·5
Max.	59 ·3	60 ·7
9. 0	59 ·1	60 ·3
21. 0	58 ·8	60 ·0

Greenwich Mean Solar Time.	Western Declination.
Nov. 6	
h m	° ' "
11. 11	20. 29. 30
11. 28	25. 20
11. 44	25. 5
11. 56	25. 55
12. 11	25. 20
12. 44	32. 0
13. 8	39. 40
13. 21	39. 40
13. 27	38. 10
13. 34	39. 20
13. 46	38. 50
14. 2	35. 20
14. 9	35. 20
14. 16	33. 10
14. 26	33. 50
14. 28	33. 25
14. 43	33. 25
14. 46	33. 10
14. 58	33. 45
15. 9	33. 20
15. 13	33. 35
15. 25	32. 50
15. 40	33. 0
15. 43	34. 20
15. 53	33. 40
15. 57	33. 5
16. 8	33. 20
16. 22	33. 0
16. 53	33. 20
16. 57	32. 15
17. 22	32. 15
17. 37	33. 40
17. 42	33. 25
17. 55	33. 40
18. 1	33. 5
18. 12	33. 20
18. 40	32. 30
18. 55	32. 45
18. 59	30. 20
19. 26	33. 0
19. 39	30. 15
19. 41	31. 30
19. 56	31. 30
	***
20. 37	33. 0
20. 56	31. 0
21. 25	32. 45
21. 38	33. 50
21. 42	33. 50
22. 8	36. 55
22. 40	37. 25
23. 9	37. 35
23. 25	37. 20
23. 27	38. 25
23. 29	36. 50
23. 38	36. 40
23. 47	36. 40
23. 59	38. 40

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov. 6	
h m	
13. 51	·1395
14. 10	·1388
14. 14	·1390
14. 22	·1387
14. 30	·1391
15. 14	·1389
15. 41	·1392
15. 50	·1395
15. 57	·1390
16. 12	·1392
16. 55	·1394
17. 54	·1388
18. 54	·1395
19. 10	·1392
19. 25	·1398
19. 41	·1388
19. 48	·1396
19. 59	·1393
20. 11	·1396
20. 55	·1388
21. 17	·1385
21. 26	·1383
21. 36	·1384
21. 53	·1376
22. 5	·1364
22. 41	·1356
23. 24	·1366
	***
23. 59	·1384

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 7		Nov. 7		Nov. 7		Nov. 7		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 38. 40	0. 0	·1384	0. 0	·02603	Min.	59 ·2	60 ·8
0. 10	38. 40	0. 12	·1371	2. 9	·02642	1. 0	59 ·6	61 ·0
0. 13	41. 0	0. 25	·1364	2. 48	·02677	3. 0	59 ·6	61 ·0
0. 17	41. 5	0. 39	·1385	3. 53	·02671	9. 0	59 ·6	62 ·0
0. 27	37. 50	0. 46	·1384	4. 23	·02698	Max.	60 ·5	62 ·7
0. 37	39. 40	1. 25	·1390	4. 47	·02677	21. 0	60 ·1	62 ·0
0. 56	36. 40	1. 55	·1387	5. 9	·02701	22. 0	59 ·7	61 ·9
1. 41	39. 5	2. 15	·1370	5. 49	·02674	23. 0	59 ·6	61 ·5
1. 56	40. 10	2. 40	·1388	6. 46	·02679			
2. 11	36. 0	2. 59	·1396	6. 58	·02701			
2. 26	31. 0	3. 26	·1387	7. 25	·02662			
2. 32	31. 0	3. 33	·1387	7. 51	·02670			
2. 39	32. 5	4. 3	·1363	8. 19	·02658			
2. 43	31. 40	4. 20	·1381	8. 54	·02672			
2. 55	32. 50	4. 31	·1382	9. 27	·02631			
3. 14	36. 30	4. 40	·1373	12. 46	·02666			
3. 26	36. 0	4. 44	·1375	13. 14	·02652			
3. 30	36. 5	4. 53	·1371	14. 54	·02660			
3. 41	34. 30	5. 19	·1402	18. 38	·02678			
3. 53	34. 20	5. 30	·1391	23. 59	·02673			
3. 57	33. 55	5. 41	·1393					
4. 9	30. 0	5. 56	·1385					
4. 22	31. 35	6. 12	·1387					
4. 26	31. 0	6. 37	·1384					
4. 34	32. 40	6. 49	·1375					
4. 41	30. 0	7. 4	·1410					
4. 58	20. 50	7. 13	·1399					
5. 26	32. 20	7. 19	·1402					
5. 31	32. 30	7. 26	·1394					
5. 40	33. 50	7. 50	·1414					
5. 59	32. 0	8. 1	·1405					
6. 11	31. 40	8. 11	·1407					
6. 24	32. 50	8. 42	·1374					
6. 29	32. 50	8. 51	·1379					
6. 41	33. 20	8. 56	·1376					
6. 53	21. 10	9. 11	·1408					
7. 2	28. 30	9. 24	·1394					
7. 11	30. 5	9. 37	·1394					
7. 14	28. 15	9. 53	·1382					
7. 22	29. 40	10. 0	·1385					
7. 29	21. 0	10. 6	·1381					
7. 56	24. 50	10. 26	·1382					
8. 7	22. 50	10. 41	·1378					
8. 17	24. 45	10. 57	·1384					
8. 35	26. 5	11. 29	·1386					
8. 41	25. 30	11. 40	·1383					
8. 55	32. 10	12. 11	·1392					
9. 8	27. 20	12. 32	·1386					
9. 12	28. 30	13. 4	·1397					
9. 22	28. 45	13. 30	·1400					
9. 28	26. 0	13. 41	·1403					
9. 38	26. 0	13. 58	·1397					
9. 42	26. 40	14. 12	·1398					
9. 54	25. 0	14. 49	·1387					
9. 58	25. 30	15. 18	·1386					
10. 9	25. 30	15. 51	·1392					
10. 21	26. 40	16. 22	·1394					
10. 39	30. 0	17. 21	·1391					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 7		Nov. 7						
h m	° ′ ″	h m		h m		h m		°
10. 44	20. 29. 40	17. 25	·1394					
11. 8	31. 40	17. 39	·1392					
11. 16	31. 5	18. 23	·1395					
11. 27	31. 20	18. 25	·1391					
11. 42	30. 40	18. 29	·1395					
11. 51	30. 50	19. 4	·1398					
11. 58	29. 0	20. 22	·1387					
12. 39	30. 30	20. 33	·1391					
12. 50	36. 50	20. 41	·1387					
13. 6	35. 0	21. 11	·1391					
13. 13	33. 5	22. 12	·1386					
13. 26	32. 10	22. 40	·1376					
13. 42	33. 15	22. 54	·1378					
14. 9	28. 30	23. 19	·1364					
14. 16	28. 30	23. 56	·1383					
14. 39	30. 15	23. 59	·1380					
15. 7	33. 10							
15. 23	32. 50							
15. 38	33. 15							
15. 51	33. 15							
16. 11	32. 10							
16. 37	33. 20							
16. 58	33. 30							
17. 26	33. 0							
17. 28	33. 15							
17. 38	32. 10							
17. 56	33. 0							
17. 59	32. 40							
18. 23	33. 30							
18. 26	32. 40							
18. 36	33. 15							
19. 21	32. 0							
19. 28	33. 5							
	***							
19. 56	32. 40							
20. 21	32. 40							
20. 27	32. 5							
	***							
21. 11	30. 15							
21. 26	35. 0							
21. 38	32. 50							
21. 43	33. 0							
21. 56	37. 5							
22. 1	32. 50							
22. 14	37. 30							
22. 39	35. 20							
22. 56	38. 5							
23. 0	36. 15							
23. 13	35. 55							
23. 41	36. 50							
23. 55	34. 40							
23. 59	37. 0							
Nov. 8		Nov. 8		Nov. 8		Nov. 8		
0. 0	20. 37. 0	0. 0	·1380	0. 0	·02673	0. 0	59 ·6	61 ·5
0. 4	39. 40	0. 17	·1391	1. 6	·02710	1. 0	60 ·1	61 ·9
0. 26	36. 30	0. 40	·1374	4. 27	·02682	2. 0	59 ·6	62 ·0
0. 36	38. 15	0. 43	·1373	6. 31	·02687	3. 0	59 ·6	62 ·0
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Nov. 8	
h m	° ′ ″
1. 9	20. 40. 30
1. 12	42. 50
1. 26	38. 15
1. 37	39. 50
1. 41	38. 15
1. 53	41. 30
2. 1	37. 30
2. 9	37. 30
2. 14	36. 50
2. 43	35. 50
2. 46	37. 30
2. 58	36. 30
3. 11	37. 15
3. 20	36. 30
3. 28	37. 20
3. 41	36. 20
3. 55	37. 10
3. 59	37. 10
4. 21	36. 0
4. 30	36. 0
4. 42	34. 30
4. 54	35. 0
5. 14	34. 50
5. 27	33. 20
5. 44	33. 55
5. 59	33. 55
6. 12	34. 15
6. 26	33. 30
6. 39	33. 50
7. 13	32. 50
7. 56	32. 50
8. 26	32. 5
8. 56	32. 5
9. 11	29. 30
9. 16	28. 55
9. 26	28. 55
9. 41	28. 15
9. 53	37. 15
10. 3	23. 0
10. 11	17. 0
10. 29	25. 0
10. 53	30. 0
10. 59	29. 5
11. 11	29. 15
11. 34	31. 0
12. 4	28. 20
12. 11	28. 30
12. 27	32. 0
12. 56	38. 55
13. 11	36. 0
13. 28	34. 5
13. 41	33. 15
13. 56	34. 0
14. 10	32. 0
14. 16	31. 45
14. 44	33. 0
14. 56	33. 45
15. 11	32. 40
15. 26	20. 32. 40
15. 38	33. 15
15. 41	34. 20
15. 53	31. 30
16. 8	33. 45
16. 11	33. 20
16. 26	34. 30
16. 41	34. 0
16. 54	35. 10
17. 10	34. 40
17. 33	33. 10
17. 51	33. 35
17. 59	33. 0
18. 23	33. 0
18. 27	34. 15
18. 36	32. 45
18. 53	33. 10
19. 25	32. 40
19. 40	34. 10
19. 54	33. 30
20. 3	34. 0
20. 13	32. 30
20. 26	32. 0
20. 29	33. 5
20. 39	32. 25
20. 57	33. 40
21. 26	32. 25
21. 42	33. 40
22. 11	34. 20
22. 29	35. 10
22. 43	34. 30
22. 53	34. 35
22. 58	34. 0
23. 19	35. 50
23. 27	37. 25
23. 38	36. 50
23. 41	37. 15
23. 44	36. 15
23. 56	37. 30
23. 59	37. 0
Nov. 9	
0. 0	20. 37. 0
0. 9	36. 20
0. 22	37. 5
0. 28	35. 15
0. 45	36. 40
0. 54	37. 55
0. 57	37. 30
1. 4	37. 55
1. 26	33. 10
1. 43	34. 50
1. 51	34. 35
2. 13	35. 30
3. 26	33. 30
3. 54	31. 15
4. 11	30. 30
4. 22	31. 10

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov. 8	
h m	
0. 49	·1381
0. 57	·1378
1. 9	·1378
1. 20	·1365
1. 28	·1368
1. 40	·1363
1. 52	·1379
1. 56	·1374
2. 13	·1381
2. 27	·1391
2. 53	·1389
3. 16	·1399
3. 41	·1392
3. 53	·1396
4. 5	·1393
4. 21	·1396
5. 23	·1395
5. 39	·1401
5. 51	·1390
5. 55	·1392
6. 12	·1388
6. 24	·1392
6. 42	·1391
6. 55	·1394
7. 14	·1392
7. 26	·1395
7. 41	·1392
7. 48	·1394
8. 14	·1392
8. 43	·1395
8. 55	·1389
9. 11	·1391
9. 41	·1377
9. 51	·1406
9. 57	·1390
10. 9	·1392
10. 16	·1407
10. 42	·1385
10. 56	·1380
11. 17	·1388
11. 41	·1391
11. 47	·1393
12. 12	·1390
12. 28	·1395
12. 39	·1394
12. 52	·1398
13. 11	·1383
13. 23	·1393
14. 4	·1390
14. 13	·1393
14. 31	·1387
15. 13	·1392
15. 25	·1388
15. 43	·1393
16. 36	·1387
17. 39	·1397
17. 54	·1394
17. 58	·1393
18. 25	·1395
18. 34	·1392
18. 44	·1394
19. 26	·1393
19. 52	·1391
20. 11	·1378
20. 19	·1376
20. 32	·1379
20. 52	·1384
20. 59	·1382
21. 12	·1387
21. 25	·1384
21. 50	·1378
22. 20	·1382
22. 24	·1383
22. 40	·1379
22. 53	·1375
23. 3	·1380
23. 13	·1375
23. 20	·1378
23. 27	·1373
23. 43	·1376
23. 54	·1373
23. 59	·1374
Nov. 9	
0. 0	·1374
0. 13	·1379
0. 21	·1377
0. 30	·1387
0. 38	·1388
0. 52	·1385
0. 57	·1379
1. 5	·1387
1. 13	·1385
1. 25	·1392
2. 6	·1395
2. 30	·1399
2. 52	·1394
2. 59	·1396
3. 30	·1393
3. 42	·1395

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Nov. 8	
h m	
12. 30	·02641
13. 2	·02615
13. 51	·02630
19. 28	·02633
20. 24	·02620
20. 56	{ ·02638 ·02802
23. 1	·02797
23. 59	·02810
Nov. 9	
h m	
0. 0	·02810
1. 5	·02808
	(†)
2. 19	·03500
3. 36	·03486
5. 30	·03481
6. 53	·03493
7. 26	·03509
8. 9	·03491
8. 30	·03496
10. 9	·03467
11. 59	·03467
12. 54	·03463
13. 30	·03492
20. 59	·03509
23. 59	·03481

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 8		
h m	°	°
Max.	60·5	62·5
9. 0	59·6	62·0
Min.	57·9	60·0
21. 0	58·6	60·2
22. 0	58·8	60·4
23. 0	58·8	60·4
Nov. 9		
0. 0	58·9	60·4
Min.	58·9	60·4
1. 0	59·1	61·0
2. 0	59·4	61·6
3. 0	59·6	62·0
9. 0	59·2	61·6
21. 0	59·9	62·6
Max.	60·6	62·6

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

November 9^{d}. 1^{h}. 20^{m}. VERTICAL FORCE.—The adjustments were altered, so that the readings were increased by 8^{div}·55, or by 0·005806 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 9		Nov. 9						
h m	° ′ ″	h m		h m		h m	°	°
4. 35	20. 30. 0	3. 55	·1392					
4. 55	30. 0	4. 15	·1399					
5. 11	32 0	4. 42	·1390					
5. 14	31. 50	5. 0	·1392					
5. 26	30. 20	5. 22	·1382					
5. 40	30. 0	5. 40	·1388					
5. 51	28. 40	6. 4	·1387					
5. 56	28. 0	6. 42	·1382					
5. 59	27. 20	6. 56	·1368					
6. 11	28. 10	7. 12	·1383					
6. 21	28. 5	7. 20	·1379					
6. 39	30. 10	7. 30	·1383					
6. 42	30. 0	7. 42	·1377					
6. 55	23. 0	7. 53	·1378					
6. 59	17. 10	7. 59	·1371					
7. 11	19. 45	8. 19	·1366					
7. 17	19. 45	8. 42	·1390					
7. 27	20. 10	9. 0	·1385					
7. 41	24. 50	9. 15	·1388					
7. 53	27. 0	9. 27	·1386					
7. 58	27. 5	9. 54	·1398					
8. 26	19. 0	10. 11	·1391					
8. 43	28. 20	10. 24	·1394					
8. 56	29. 30	10. 41	·1390					
9. 8	29. 5	10. 58	·1393					
9. 27	30. 50	11. 12	·1388					
9. 45	30. 10	11. 24	·1392					
9. 57	31. 50	11. 43	·1388					
10. 9	31. 20	12. 7	·1397					
10. 21	32. 15	12. 31	·1388					
10. 41	31. 25	12. 46	·1391					
10. 53	32. 20	13. 22	·1388					
11. 12	30. 10	15. 59	·1393					
11. 28	31. 0	16. 26	·1395					
11. 38	30. 30	17. 11	·1397					
11. 54	30. 40	17. 34	·1392					
12. 9	33. 10	17. 58	·1394					
12. 21	33. 30	19. 56	·1392					
12. 56	31. 5	20. 19	·1393					
13. 8	31. 40	21. 0	·1385					
13. 24	31. 15	21. 11	·1389					
13. 28	31. 25	21. 54	·1379					
13. 42	31. 0	22. 11	·1383					
13. 55	31. 20	22. 22	·1379					
14 59	31. 0	22. 39	·1384					
15. 34	31. 15	22. 43	·1379					
15. 43	31. 45	22. 53	·1384					
15. 53	31. 20	22. 55	·1382					
16. 8	31. 50	23. 4	·1385					
16. 59	31. 10	23. 9	·1385					
17. 26	32. 45	23. 13	·1393					
17. 58	32. 0	23. 25	·1395					
18. 9	32. 20	23. 31	·1390					
18. 24	31. 40	23. 59	·1393					
18. 38	32. 20							
18. 52	31. 50							
19. 27	31. 40							
19. 30	31. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 9								
h m	° ′ ″	h m		h m		h m	°	°
19. 40	20. 31. 55							
19. 44	31. 10							
19. 55	31. 10							
19. 58	32. 10							
20. 7	31. 40							
20. 13	32. 30							
20. 32	32. 0							
20. 41	31. 10							
20. 51	31. 35							
20. 56	30. 55							
	* * *							
21. 54	31. 30							
22. 2	31. 0							
22. 12	31. 30							
22. 43	31. 0							
22. 53	32. 0							
22. 57	32. 0							
23. 8	33. 15							
23. 11	33. 15							
23. 22	34. 10							
23. 26	36. 10							
23. 31	36. 15							
23. 39	36. 55							
23. 53	36. 15							
23. 59	36. 40							
Nov. 10		Nov. 10		Nov. 10		Nov. 10		
0. 0	20. 36. 40	0. 0	·1393	0. 0	·03481	1. 0	59·6	61·5
0. 26	33. 40	0. 15	·1385	2. 23	·03519	3. 0	59·2	61·3
0. 44	36. 5	0. 21	·1377	3. 42	·03484	Max.	60·7	62·2
0. 57	35. 10	0. 45	·1391	8. 4	·03486	9. 0	59·3	61·2
1. 8	36. 5	1. 4	·1391	8. 56	·03475	Min.	57·0	58·0
1. 31	36. 5	1. 24	·1400	12. 39	·03437	21. 0	57·3	58·0
1. 44	35. 50	1. 43	·1399	17. 9	·03390			
2. 6	32. 50	1. 56	·1395	17. 22	·03406			
2. 11	30. 40	2. 23	·1396	17. 41	·03375			
2. 23	31. 30	2. 25	·1394	18. 5	·03339			
2. 27	31. 0	3. 11	·1403	18. 21	·03344			
2. 56	33. 0	3. 52	·1402	18. 43	·03382			
3. 27	35. 5	4. 24	·1404	19. 23	·03361			
3. 43	35. 0	5. 14	·1406	19. 59	·03385			
3. 55	34. 15	5. 43	·1404	20. 23	·03371			
4. 26	34. 35	5. 56	·1406	20. 52	·03390			
5. 8	33. 0	6. 26	·1402	20. 59	·03382			
5. 12	33. 35	6. 50	·1404	21. 6	·03391			
5. 25	33. 0	7. 15	·1399	21. 23	·03370			
5. 44	33. 15	7. 39	·1409	22. 9	·03375			
6. 41	32. 5	8. 15	·1402	23. 2	·03423			
6. 57	32. 40	8. 26	·1420	23. 59	·03391			
7. 25	27. 30	8. 56	·1404					
7. 43	31. 0	9. 7	·1407					
8. 11	31. 50	9. 14	·1403					
8. 14	25. 10	9. 40	·1409					
8. 25	26. 20	10. 14	·1403					
8. 40	26. 30	10. 45	·1407					
8. 58	30. 50	10. 59	·1406					
9. 12	31. 25	11. 10	·1408					
9. 26	29. 0	11. 33	·1405					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Nov.10	
h m	° ′ ″
9. 38	20. 29. 30
10. 12	30. 20
10. 27	31. 30
10. 39	30. 45
11. 0	30. 45
11. 24	30. 0
11. 39	30. 55
12. 41	32. 0
12. 56	31. 20
13. 21	30. 20
13. 38	32. 30
13. 53	30. 40
14. 9	30. 20
14. 13	31. 0
14. 28	30. 25
14. 43	31. 20
14. 56	31. 5
15. 9	33. 0
15. 12	33. 0
15. 23	33. 50
15. 28	33. 30
15. 40	33. 50
15. 56	32. 0
16. 41	32. 0
16. 56	31. 40
17. 8	31. 50
17. 11	31. 0
17. 26	43. 0
17. 41	55. 15
17. 56	46. 40
18. 10	42. 0
18. 22	37. 20
18. 29	37. 20
18. 41	43. 0
18. 56	48. 40
19. 4	46. 40
19. 9	41. 0
19. 18	36. 50
19. 26	35. 40
	***
19. 49	35. 10
20. 6	39. 25
20. 11	35. 20
20. 24	34. 30
20. 30	34. 40
20. 54	38. 30
20. 57	38. 0
21. 9	39. 30
21. 24	37. 0
21. 29	38. 50
21. 43	38. 15
22. 27	41. 20
22. 41	39. 5
	(†)
Nov.11	
0. 0	20. 37. 30
0. 11	38. 10

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov.10	
h m	
11. 42	·1400
12. 15	·1403
12. 44	·1406
13. 41	·1403
13. 56	·1400
14. 20	·1405
14. 41	·1401
14. 54	·1403
15. 41	·1399
16. 19	·1404
17. 20	·1406
17. 34	·1419
17. 50	·1406
17. 56	·1406
18. 26	·1355
18. 34	·1351
18. 45	·1368
19. 1	·1365
19. 17	·1379
19. 40	·1360
19. 42	·1364
19. 55	·1370
20. 4	·1367
20. 15	·1371
20. 25	·1363
20. 29	·1366
20. 42	·1364
20. 54	·1365
21. 6	·1353
21. 12	·1367
21. 25	·1356
21. 39	·1374
21. 45	·1366
22. 4	·1372
22. 26	·1390
22. 52	·1378
23. 11	·1377
23. 25	·1391
23. 43	·1382
23. 54	·1373
23. 56	·1376
23. 59	·1381
Nov.11	
0. 0	·1381
0. 12	·1379

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Nov.11	
0. 0	·03391
5. 19	·03459

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	°	
Nov.11		
Min.	58 ·1	58 ·8
1. 0	58 ·3	59 ·0

Greenwich Mean Solar Time.	Western Declination.
Nov.11	
h m	° ′ ″
0. 38	20. 38. 10
1. 36	34. 30
1. 57	35. 0
2. 33	36. 0
2. 42	34. 50
2. 53	35. 10
3. 11	33. 50
3. 22	34. 25
3. 37	33. 30
3. 56	33. 50
4. 9	32. 30
4. 26	31. 50
4. 38	30. 0
4. 56	31. 15
4. 57	30. 45
5. 7	31. 10
5. 23	23. 0
5. 27	17. 10
5. 39	22. 0
5. 44	33. 15
5. 56	33. 25
6. 2	30. 50
6. 9	28. 30
6. 24	28. 20
6. 42	31. 10
6. 55	30. 40
7. 9	31. 30
7. 14	30. 50
7. 22	30. 50
7. 26	31. 40
7. 38	31. 0
7. 44	32. 15
7. 56	31. 15
7. 58	31. 15
8. 8	30. 40
8. 14	30. 50
8. 31	30. 0
8. 39	29. 0
8. 56	29. 0
9. 13	30. 10
9. 23	29. 30
9. 38	29. 40
9. 52	30. 15
10. 26	30. 45
10. 41	31. 30
11. 11	30. 40
11. 26	30. 30
11. 55	31. 40
12. 3	31. 40
12. 12	33. 20
12. 26	33. 45
12. 37	33. 10
12. 57	24. 30
13. 8	23. 15
13. 20	23. 35
13. 37	29. 0
13. 53	32. 0
14. 20	23. 40
14. 37	24. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov.11	
h m	
0. 15	·1381
0. 23	·1380
0. 28	·1386
0. 44	·1380
0. 49	·1382
1. 10	·1387
1. 14	·1392
1. 30	·1385
1. 45	·1389
2. 18	·1392
2. 45	·1388
2. 55	·1394
3. 11	·1384
3. 27	·1391
4. 12	·1386
4. 28	·1388
4. 41	·1386
4. 48	·1390
5. 23	·1377
5. 37	·1406
5. 41	·1405
5. 45	·1412
5. 55	·1370
6. 9	·1361
6. 54	·1383
7. 13	·1376
7. 22	·1378
7. 30	·1376
7. 40	·1381
7. 52	·1378
8. 11	·1383
8. 31	·1377
9. 6	·1381
9. 9	·1386
9. 24	·1380
9. 43	·1386
9. 57	·1384
10. 40	·1387
10. 55	·1385
11. 24	·1387
11. 34	·1385
12. 12	·1389
12. 56	·1377
13. 43	·1398
14. 13	·1394
14. 22	·1388
14. 41	·1393
15. 14	·1375
15. 39	·1377
15. 55	·1376
16. 12	·1378
16. 24	·1376
16. 41	·1378
16. 54	·1372
17. 24	·1383
17. 27	·1366
17. 35	·1376
17. 57	·1367
18. 11	·1379

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Nov.11	
h m	
5. 26	·03476
5. 41	·03476
5. 57	·03451
6. 34	·03477
6. 55	·03474
9. 8	·03481
9. 39	·03471
12. 22	·03462
13. 4	·03441
13. 44	·03432
14. 10	·03381
14. 36	·03344
14. 55	·03341
15. 29	·03390
16. 39	·03426
16. 54	·03416
17. 24	·03435
17. 26	·03418
17. 32	·03432
17. 58	·03434
18. 9	·03452
18. 19	·03416
18. 54	·03404
19. 25	·03411
19. 33	·03416
19. 45	·03420
19. 54	·03410
20. 25	·03441
21. 39	·03476
23. 59	·03503

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Nov.11		
h m		
3. 0	58 ·3	60 ·0
9. 0	58 ·8	60 ·5
22. 0	59 ·6	61 ·0
Max.	59 ·8	61 ·5

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 11		Nov. 11						
h m	° ′ ″	h m		h m		h m	°	°
14. 56	20. 28. 25	18. 15	·1377					
14. 59	29. 5	18. 26	·1384					
15. 11	33. 30	18. 41	·1377					
15. 26	34. 20	18. 52	·1362					
15. 28	33. 50	19. 10	·1350					
15. 36	34. 15	19. 13	·1354					
15. 42	33. 30	19. 17	·1353					
15. 49	35. 25	19. 22	·1357					
16. 6	36. 25	19. 26	·1354					
16. 10	35. 0	19. 43	1378					
16. 21	34. 40	19. 54	·1368					
16. 30	38. 50	20. 8	·1384					
16. 43	34. 15	20. 18	·1384					
16. 56	33. 50	20. 25	·1376					
17. 8	33. 0	20. 55	·1373					
17. 12	35. 50	21. 11	·1359					
17. 16	30. 55	21. 15	·1367					
17. 23	33. 0	21. 25	·1364					
17. 36	36. 0	21. 41	·1372					
17. 43	36. 20	22. 0	·1373					
18. 8	54. 15	22. 27	·1377					
18. 12	50. 0	22. 48	·1372					
18. 17	48. 50	22. 56	·1376					
18. 26	50. 5	23. 19	·1374					
18. 39	52. 40	23. 40	·1377					
18. 42	52. 0	23. 50	·1376					
18. 54	52. 0	23. 59	·1379					
18. 57	51. 5							
19. 11	53. 45							
19. 18	56. 50							
19. 25	54. 0							
19. 28	52. 0							
19. 36	52. 0							
19. 52	41. 15							
19. 57	40. 0							
19. 59	40. 0							
20. 9	39. 10							
20. 11	40. 0							
20. 14	37. 10							
20. 23	38. 50							
20. 27	38. 50							
20. 41	36. 0							
20. 52	36. 0							
20. 56	36. 40							
20. 58	34. 10							
21. 8	38. 10							
21. 12	38. 20							
21. 23	36. 40							
21. 36	40. 0							
21. 41	37. 55							
21. 43	38. 0							
22. 25	31. 40							
22. 40	30. 0							
22. 56	30. 10							
23. 11	27. 55							
23. 31	27. 15							
23. 42	27. 30							
23. 59	27. 50							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 12		Nov. 12		Nov. 12		Nov. 12		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 27. 50	0. 0	·1379	0. 0	·03503	1. 0	60·3	62·1
0. 39	29. 30	1. 22	·1388	2. 4	·03532	Max.	60·7	62·4
0. 58	30. 0	1. 45	·1384	5. 16	·03514	9. 0	59·1	60·5
1. 37	31. 0	2. 31	·1381	12. 50	·03481	Min.	58·2	60·0
1. 41	30. 30	3. 25	·1388	15. 19	·03480	21. 0	59·0	61·0
1. 55	30. 30	4. 3	·1396	19. 33	·03457			
2. 42	28. 50	5. 12	·1397	23. 59	·03450			
3. 0	28. 50	6. 6	·1391					
3. 30	26. 40	8. 43	·1387					
4. 8	26. 30	10. 15	·1394					
4. 37	27. 10	11. 46	·1392					
4. 56	25. 0	13. 26	·1388					
5. 29	28. 50	14. 21	·1386					
6. 39	28. 35	15. 19	·1388					
8. 24	29. 40	15. 36	·1385					
9. 43	30. 15	15. 57	·1395					
10. 53	33. 0	16. 12	·1393					
11. 39	33. 20	16. 29	·1399					
13. 9	35. 50	17. 53	·1396					
13. 58	36. 35	18. 24	·1401					
14. 9	36. 50	18. 26	·1399					
15. 10	36. 50	18. 39	·1403					
15. 15	36. 20	18. 56	·1403					
15. 26	37. 0	19. 9	·1399					
15. 43	32. 45	19. 19	·1400					
15. 56	33. 20	19. 29	·1393					
16. 14	31. 50	19. 56	·1391					
17. 11	31. 5	20. 8	·1393					
17. 29	30. 55	20. 39	·1389					
17. 42	31. 5	20. 56	·1390					
17. 53	30. 20	21. 25	·1382					
18. 13	30. 50	21. 51	·1386					
18. 23	31. 5	23. 26	·1387					
18. 26	30. 0	23. 59	·1388					
18. 42	31. 10							
18. 47	30. 55							
19. 22	31. 50							
19. 38	31. 0							
19. 54	30. 30							
20. 7	30. 30							
20. 14	30. 10							
20. 29	30. 15							
20. 41	29. 45							
20. 58	30. 10							
21. 9	29. 50							
21. 41	30. 15							
22. 37	33. 20							
23. 8	34. 30							
23. 30	34. 40							
23. 54	35. 20							
23. 59	35. 10							
Nov. 13		Nov. 13		Nov. 13		Nov. 13		
0. 0	20. 35. 10	0. 0	·1388	0. 0	·03450	1. 0	59·8	61·9
1. 56	33. 50	0. 30	·1392	3. 14	·03481	3. 0	59·3	61·5
2. 38	32. 20	0. 55	·1395	11. 10	·03466	Max.	59·8	62·0
3. 13	31. 55	1. 0	·1394	14. 3	·03430	[illegible]	59·6	62·0
3. 50	31. 40	1. 11	·1399	14. 41	·03416	Min.	57·4	59·5

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.13		Nov.13		Nov.13		Nov.13		
h m	° ′ ″	h m		h m		h m	°	°
4.26	20.32. 0	1.24	·1396	19.44	·03422	21. 0	58 ·1	60 ·1
5.39	31.10	1.57	·1397	21. 2	·03401			
5.52	31.30	2.18	·1395		·03272			
6.13	31. 5	2.55	·1398	22.52	·03221			
6.53	31.30	2.57	·1404	23.59	·03227			
7.12	31. 0	3.11	·1397					
7.27	31.40	3.27	·1394					
7.42	31. 0	4.19	·1397					
7.53	31.30	5.44	·1399					
8. 3	30.40	7. 4	·1398					
8.13	31.10	8.19	·1393					
9. 0	29.25	8.56	·1394					
9.17	30. 0	9.23	·1392					
9.46	30. 0	9.41	·1395					
9.56	30.25	10. 1	·1393					
10.27	28. 0	10.18	·1395					
10.40	28.10	10.37	·1391					
10.47	29. 0	10.55	·1394					
10.55	28.40	11. 1	·1392					
11. 0	29. 0	11.26	·1397					
11. 9	28.40	12. 4	·1391					
11.30	29.40	12.30	·1401					
11.54	27.20	12.54	·1397					
11.59	28. 0	13. 2	·1399					
12. 9	27.10	13.41:	·1384					
12.28	27.25	13.54	·1389					
12.39	28. 0	14.12	·1403					
12.41	27. 5	14.18	·1402					
13. 6	27.50	14.34	·1405					
13. 9	27.30	15.10	·1394					
13.24	29.30	15.23	·1395					
13.47	33.55	16.13	·1404					
13.59	31.15	17. 4	·1407					
14.12	33.35	17.24	·1405					
14.38	31. 5	17.34	·1407					
14.41	31. 5	17.50	·1403					
14.53	30. 0	17.56	·1405					
15. 8	30. 0	18.12	·1400					
15.17	31. 0	18.43	·1401					
15.42	31. 0	19.10	·1398					
15.53	31.20	19.22	·1397					
16. 9	30.25	19.43	·1400					
16.24	30. 0	20. 0	·1394					
16.57	30.30	20. 9	·1404					
17.29	30.30	20.12	·1401					
17.41	31.10	20.18	·1404					
17.46	30. 0	20.41	·1398					
17.58	31.40	20.50	·1401					
18. 9	31.10	21.14	·1389					
18.26	31. 0	21.43	·1392					
18.36	30. 0	21.57	·1389					
18.44	30.50	22.24	·1393					
19.16	31. 0		***					
19.26	30.10	23. 4	·1389					
19.42	30.45	23.37	·1390					
19.55	30.45	23.47	·1395					
19.59	28. 0	23.50	·1392					
20. 9	30.10	23.59	·1395					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.13								
h m	° ′ ″	h m		h m		h m	°	°
20.23	20.31.20							
20.28	31.20							
20.40	30. 0							
20.54	31.25							
21. 7	31. 0							
21.12	32.55							
21.38	32.35							
21.51	34.20							
22.11	35. 0							
22.38	37.30							
22.41	37.10							
22.45	38. 0							
22.56	37.10							
23.11	36.55							
23.23	38. 0							
23.42	38. 0							
23.44	37.10							
23.53	38.15							
23.56	37.30							
23.59	38. 0							
Nov.14		Nov.14		Nov.14		Nov.14		
0. 0	20.38. 0	0. 0	·1395	0. 0	·03227	Min.	58 ·6	60 ·1
0. 8	37.25	0.15	·1396	2.57	·03246	1. 0	58 ·8	60 ·1
0.23	38.40	0.53	·1395	4.46	·03347	3. 0	59 ·0	61 ·0
0.39	38.40	1.11	·1399	5.16	·03384	9. 0	60 ·3	63 ·0
0.56	37.10	1.13	·1403	5.39	·03381	Max.	60 ·9	63 ·2
1. 6	37. 0	1.16	·1397	6. 6	·03416	21. 0	60 ·4	62 ·2
1.11	37.50	1.48	·1406	6.24	·03410	22. 0	60 ·1	63 ·0
1.13	36.40	2. 0	·1404	6.56	·03417	23. 0	59 ·6	61 ·3
1.37	36.40	2. 4	·1408	9. 3	·03435			
1.42	36. 0	2.12	·1403	10.11	·03410			
1.46	37. 0	2.19	·1407	10.25	·03414			
2. 1	36.20	2.36	·1404	10.41	·03395			
2. 8	37. 0	2.42	·1407	12. 6	·03402			
2.11	36. 0	2.53	·1401	12.24	·03393			
2.16	37. 5	2.57	·1405	20.53	·03406			
2.23	36.40	3.12	·1399	23.59	·03392			
2.41	36.30	3.19	·1405					
2.45	38. 0	3.39	·1403					
3. 8	37.10	3.55	·1387					
3.11	37.20	4.19	·1398					
3.14	36.25	4.54	·1367					
3.41	36.30	5.26	·1378					
4.11	37.20	5.34	·1372					
4.27	36.30	5.43	·1355					
4.44	33.30	5.54	·1361					
5. 4	26. 0	6. 0	·1360					
5.33	20. 0	6.14	·1366					
5.43	14. 0	6.23	·1365					
5.54	11. 0	6.39	·1376					
6. 7	12. 5	6.42	·1375					
6.11	11. 0	6.55	·1377					
6.22	12. 5	7.11	·1367					
6.36	8. 0	7.24	·1368					
6.47	15. 0	7.34	·1361					
7. 6	26.20	7.55	·1379					
7. 9	26.20	8.11	·1366					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 14		Nov. 14						
h m	° ′ ″	h m		h m		h m	°	°
7. 13	20. 24. 45	8. 24	·1361					
7. 28	28. 30	8. 30	·1365					
7. 39	26. 30	8. 45	·1347					
7. 54	24. 30	8. 55	·1367					
8. 8	29. 0	9. 6	·1364					
8. 14	26. 30	9. 18	·1369					
8. 26	24. 20	9. 24	·1366					
8. 44	27. 50	9. 35	·1379					
8. 55	24. 0	9. 48	·1379					
9. 4	25. 30	10. 11	·1370					
9. 23	31. 10	10. 25	·1398					
9. 28	30. 15	10. 42	·1377					
9. 43	32. 10	10. 55	·1381					
9. 54	32. 10	11. 24	·1377					
10. 0	32. 30	11. 35	·1383					
10. 6	31. 45	11. 53	·1380					
10. 12	31. 35	12. 12	·1393					
10. 22	30. 20	12. 19	·1385					
10. 37	34. 0	12. 32	·1386					
10. 45	31. 15	13. 12	·1379					
10. 53	30. 50	13. 27	·1384					
11. 8	31. 40	14. 26	·1382					
11. 27	30. 40	15. 9	·1384					
11. 46	32. 10	15. 14	·1381					
11. 53	32 0	15. 26	·1385					
11. 56	30. 50	16. 19	·1382					
12. 10	34. 25	16. 45	·1386					
12. 27	32. 45	18. 53	·1386					
12. 41	33. 5	21. 27	·1380					
12. 48	32. 40	21. 43	·1381					
12. 57	33. 10	21. 56	·1378					
13. 10	33. 0	22. 14	·1380					
13. 13	32. 30	22. 27	·1379					
13. 39	33. 30	22. 44	·1382					
13. 59	33. 0	23. 11	·1380					
14. 16	31. 30	23. 36	·1384					
14. 42	34. 0	23. 44	·1383					
14. 54	32. 30	23. 59	·1384					
15. 8	32. 45							
15. 12	33. 40							
15. 23	32. 20							
15. 41	33. 15							
15. 56	32. 10							
16. 15	31. 30							
16. 31	32. 40							
16. 40	32. 25							
16. 45	32. 40							
17. 6	31. 50							
17. 11	32. 10							
17. 22	31. 30							
17. 30	31. 20							
17. 56	31. 40							
18. 29	31. 15							
18. 41	31. 40							
18. 56	31. 25							
20. 32	31. 30							
20. 43	31. 10							
20. 55	31. 40							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 14								
h m	° ′ ″	h m		h m		h m	°	°
20. 58	20. 31. 20							
21. 26	32. 50							
21. 30	32. 10							
21. 42	33. 0							
22. 6	33. 10							
22. 15	34. 0							
22. 25	33. 40							
22. 39	34. 20							
22. 43	35. 50							
22. 56	36. 0							
23. 7	35. 0							
23. 12	35. 15							
23. 21	35. 40							
23. 26	35. 40							
23. 39	36. 15							
23. 44	36. 0							
23. 56	36. 50							
23. 59	36. 50							
Nov. 15		Nov. 15		Nov. 15		Nov. 15		
0. 0	20. 36. 50	0. 0	·1384	0. 0	·03392	0. 0	59 ·9	61 ·5
0. 28	36. 30	0. 42	·1389	2. 28	·03421	1. 0	60 ·1	61 ·5
0. 56	37. 10	0. 57	·1400	8. 59	·03383	2. 0	60 ·1	61 ·5
1. 10	35. 55	1. 15	·1406	11. 9	·03346	3. 0	59 ·6	61 ·0
1. 23	35. 50	1. 22	·1399	12. 52	·03350	Max.	61 ·0	62 ·2
1. 28	35. 0	1. 36	·1404	13. 54	·03328	9. 0	58 ·3	59 ·5
1. 57	35. 0	2. 0	·1406	14. 44	·03329	Min.	57 ·0	59 ·0
2. 17	36. 25	2. 13	·1409	16. 23	·03317	21. 0	57 ·7	59 ·2
2. 24	36. 10	2. 26	·1402	17. 10	·03296	22. 0	57 ·5	59 ·2
2. 28	34. 25	2. 41	·1407	20. 59	·03267	23. 0	57 ·9	59 ·5
2. 41	35. 10	3. 26	·1400	23. 11	·03268			
2. 53	35. 10	3. 42	·1404	23. 59	·03286			
3. 23	34. 0	4. 48	·1407					
3. 38	33. 35	5. 0	·1405					
3. 44	34. 0	5. 16	·1409					
3. 56	33. 30	5. 31	·1404					
4. 16	33. 45	5. 50	·1407					
4. 54	33. 30	6. 40	·1405					
5. 11	33. 20	6. 44	·1409					
5. 26	33. 40	6. 56	·1407					
5. 51	32. 40	7. 28	·1409					
6. 9	33. 0	7. 52	·1400					
6. 42	32. 0	8. 0	·1406					
7. 54	31. 45	8. 11	·1411					
8. 10	32. 5	8. 14	·1405					
8. 32	31. 10	8. 23	·1406					
9. 37	31. 30	8. 43	·1402					
9. 55	30. 0	9. 0	·1405					
10. 9	30. 10	9. 12	·1403					
10. 39	26. 55	9. 15	·1407					
10. 53	28. 25	9. 25	·1401					
11. 11	29. 30	9. 36	·1407					
11. 15	29. 30	10. 12	·1399					
11. 39	31. 10	10. 43	·1405					
11. 55	31. 0	11. 11	·1400					
12. 9	30. 0	11. 13	·1401					
12. 26	30. 0	11. 19	·1399					
12. 39	29. 25	11. 30	·1401					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.15		Nov.15						
h m	° ′ ″	h m						
12. 46	20. 30. 30	11. 45	·1396					
13. 7	30. 0	12. 5	·1395					
13. 26	30. 30	12. 25	·1398					
13. 39	29. 10	12. 38	·1395					
13. 53	27. 20	12. 55	·1406					
14. 6	28. 5	13. 11	·1404					
14. 14	26. 25	13. 17	·1405					
14. 27	25. 50	13. 42	·1402					
14. 42	25. 40	13. 57	·1395					
15. 6	32. 30	14. 10	·1397					
15. 26	29. 0	14. 24	·1391					
15. 40	28. 40	14. 34	·1397					
15. 53	28. 50	14. 46	·1396					
16. 0	28. 0	15. 10	·1389					
16. 12	29. 40	15. 48	·1400					
16. 23	31. 15	16. 4	·1398					
16. 26	28. 45	16. 26	·1389					
16. 38	29. 50	16. 41	·1394					
16. 40	28. 50	16. 56	·1400					
16. 55	28. 50	17. 14	·1399					
17. 1	27. 0	17. 23	·1401					
17. 9	26. 40	17. 54	·1397					
17. 11	25. 40	18. 22	·1407					
17. 18	27. 0	18. 40	·1404					
17. 40	28. 10	18. 44	·1406					
17. 54	27. 0	18. 54	·1402					
18. 1	28. 20	19. 0	·1406					
18. 25	29. 40	19. 26	·1376					
18. 28	28. 40	19. 48	·1369					
18. 40	29. 20	20. 11	·1374					
18. 43	28. 40	20. 24	·1382					
18. 56	30. 30	20. 34	·1377					
19. 23	34. 20	20. 42	·1380					
19. 41	40. 0	20. 58	·1376					
19. 58	42. 50	21. 11	·1384					
20. 15	43. 15	21. 22	·1376					
20. 26	44. 20	21. 45	·1374					
20. 53	43. 0	22. 4	·1379					
20. 59	42. 10	22. 26	·1389					
21. 23	42. 0	22. 45	·1384					
21. 27	42. 25	22. 58	·1385					
21. 47	41. 10	23. 9	·1384					
21. 56	41. 40	23. 20	·1388					
22. 11	41. 30	23. 42	·1386					
22. 24	42. 50	23. 59	·1389					
22. 38	42. 25							
22. 56	42. 25							
23. 6	42. 40							
23. 10	42. 0							
23. 24	42. 30							
23. 40	40. 30							
23. 54	41. 15							
23. 59	40. 50							
Nov.16		Nov.16		Nov.16		Nov.16		
0. 0	20. 40. 50	0. 0	[illegible]	0. 0	·03286	0. 0	58·4	60·1
0. 11	41. 0	0. 13	[illegible]	2. 27	·03339	Min.	58·4	60·1
0. 37	40. 50	0. 26	·1390	3. 1	·03376	1. 0	58·9	60·1

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.16		Nov.16		Nov.16		Nov.16		
h m	° ′ ″	h m		h m		h m	°	°
0. 56	20. 39. 20	0. 59	·1388	6. 30	·03337	2. 0	58·9	60·4
1. 10	40. 0	1. 12	·1393	9. 54	·03321	3. 0	59·1	60·6
1. 24	39. 25	1. 26	·1389	12. 40	·03350	9. 0	59·0	60·3
1. 38	38. 50	1. 44	·1394	13. 10	·03335	21. 0	61·1	63·0
1. 41	40. 5	2. 0	·1386	13. 59	·03358	Max.	61·5	63·2
1. 56	39. 40	2. 12	·1390	21. 57	·03423			
2. 8	38. 30	2. 30	·1374	23. 59	·03417			
2. 15	38. 30	3. 38	·1403					
2. 29	33. 15	3. 54	·1405					
2. 39	31. 40	4. 0	·1403					
2. 54	31. 10	4. 15	·1407					
3. 21	33. 10	4. 29	·1403					
3. 43	34. 25	4. 45	·1408					
4. 13	33. 50	5. 29	·1405					
4. 28	33. 40	6. 28	·1408					
4. 38	33. 0	6. 47	·1406					
4. 44	33. 0	6. 57	·1408					
4. 53	32. 40	7. 42	·1406					
5. 13	33. 5	7. 52	·1409					
5. 43	32. 40	8. 0	·1406					
5. 55	33. 5	8. 39	·1409					
6. 8	32. 0	9. 2	·1406					
6. 24	32. 30	9. 23	·1408					
6. 27	32. 0	9. 29	·1406					
6. 38	32. 35	11. 7	·1407					
6. 52	31. 50	11. 56	·1403					
6. 58	32. 10	12. 9	·1404					
7. 43	31. 45	12. 32	·1396					
7. 53	31. 30	12. 56;	·1428					
7. 58	32. 5	13. 23	·1397					
8. 14	31. 30	13. 44	·1394					
10. 27	31. 20	14. 11	·1399					
10. 41	30. 45	14. 59	·1403					
11. 53	30. 0	15. 30	·1402					
11. 58	30. 15	17. 7	·1406					
12. 9	29. 55	17. 39	·1404					
12. 17	30. 20	18. 11	·1406					
12. 26	25. 10	18. 29	·1403					
12. 31	24. 15	18. 54	·1406					
13. 10	31. 30	21. 12	·1399					
13. 17	29. 0	22. 8	·1396					
13. 27	27. 55	23. 59	·1400					
13. 54	30. 10							
14. 26	30. 30							
14. 53	31. 30							
15. 9	31. 30							
15. 12	30. 50							
15. 24	30. 30							
15. 38	30. 45							
15. 48	31. 40							
16. 23	31. 20							
16. 38	32. 0							
16. 56	31. 30							
17. 7	31. 55							
17. 11	31. 20							
17. 38	31. 0							
17. 43	31. 25							
17. 59	31. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.16								
h m	° ′ ″	h m		h m		h m	°	°
18.11	20.31.40							
18.17	31. 0							
18.37	30.40							
19. 9	31. 0							
19.27	30.40							
19.42	31.10							
20.16	31. 0							
20.34	30.50							
21.43	32. 0							
22. 9	32.20							
23.13	34.30							
23.40	34.25							
23.59	35. 0							
Nov.17		Nov.17		Nov.17		Nov.17		
0. 0	20.35. 0	0. 0	·1400	0. 0	·03417	1. 0	60·6	62·0
0.36	35.10	0.50	·1403	12.18	·03425	3. 0	60·6	62·0
0.43	36. 5	1.54	·1402	21. 4	·03391	Max.	61·4	63·1
1.59	34.30	3.14	·1404	22.52	·03362	9. 0	60·6	62·0
2.46	33.10	3.25	·1407		·03283	Min.	59·3	60·8
3.11	33.10	3.43	·1405	23.59	·03286	21. 0	60·8	61·1
3.26	33.30	4.12	·1405					
3.36	33. 5	5.12	·1408					
3.47	33.30	5.42	·1406					
4. 9	33.20	6.45	·1407					
4.26	32.55	7.14	·1404					
5.29	33.10	7.30	·1406					
5.41	32.55	7.43	·1404					
6.54	32.25	8.25	·1405					
7. 3	31.20	8.29	·1403					
7.12	31.30	8.57	·1406					
7.24	31.10	10.39	·1402					
7.56	32.20	10.56	·1405					
8.28	31.25	11.15	·1402					
9. 9	32. 0	11.31	·1403					
9.41	31.30	11.43	·1400					
10.42	31.40	12. 9	·1404					
10.56	31. 0	12.42	·1400					
11.27	31. 0	13.13	·1403					
12.13	31.30	13.24	·1400					
12.58	31.25	13.50	·1404					
13.45	32.30	14.43	·1405					
14.23	32.10	14.57	·1403					
14.28	31.45	15.14	·1405					
14.38	31.45	16.24	·1407					
14.43	30.45	16.41	·1409					
15. 9	32. 0	17.30	·1408					
15.23	31.45	18.15	·1406					
15.36	32.15	18.26	·1405					
16.24	32. 5	19.14	·1407					
16.38	31.10	20. 4	·1404					
16.53	31.55	21.11	·1404					
17. 7	31.20	22.28	·1406					
17.13	31.55	22.41	·1403					
17.38	31.55	23. 4	·1405					
17.54	31.20	23. 9	·1397					
18.21	32.20	23.59	·1396					
18.26	31.50							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.17								
h m	° ′ ″	h m		h m		h m	°	°
18.57	20.31.45							
19.28	31.45							
19.44	32.20							
21. 6	31.30							
22.14	32.50							
22.31	33.40							
22.39	33.15							
22.56	33.45							
22.58	33.45							
23. 9	35. 0							
23.39	35.30							
23.59	35.35							
Nov.18		Nov.18		Nov.18		Nov.18		
0. 0	20.35.35	0. 0	·1396	0. 0	·03286	1. 0	59·8	61·2
1.57	36.10	0.51	·1400	2. 3	·03312	3. 0	59·9	61·3
2.11	35.40	1.41	·1402	13. 4	·03316	Max.	60·9	62·9
3.29	34.40	1.53	·1399	17. 0	·03321	9. 0	59·6	60·9
5.36	34. 5	3. 9	·1402	23.59	·03320	Min.	59·1	60·8
5.56	33.40	5.39	·1400			21. 0	59·6	62·0
6.46	33.40	6. 2	·1398					
6.59	33.10	7.45	·1401					
7.21	33.30	8.49	·1397					
7.44	33.10	9. 0	·1402					
8.14	33.30	10.41	·1395					
8.39	32.20	10.54	·1398					
8.54	33. 0	11.12	·1396					
8.57	32.30	12.52	·1395					
9.28	33.15	14. 0	·1399					
9.50	31.40	14.39	·1397					
10.28	33.15	17.25	·1401					
10.43	33. 0	20. 0	·1398					
11. 0	33.30	21.25	·1393					
11.10	33. 0	22.56	·1394					
11.53	33. 0	22.58	·1392					
12.11	33.25	23.59	·1394					
12.17	33. 0							
12.56	33.20							
13.23	33.50							
13.38	33. 5							
13.44	33.50							
13.58	33.30							
14.43	33. 5							
14.54	33.40							
15.26	33. 5							
16.27	33.15							
16.40	33. 0							
17.29	33. 0							
19.56	32.40							
20. 2	32.15							
20.11	32.30							
20.57	32.40							
21.11	32. 5							
21.45	33.20							
22.14	34.30							
22.24	34.10							
23.41	36.10							
23.59	36.10							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Nov. 19	
h m	° ′ ″
0. 0	20. 36. 10
0. 26	36. 10
0. 44	36. 40
2. 0	35. 0
2. 43	34. 30
3. 58	34. 30
4. 21	34. 5
5. 28	34. 0
7. 16	32. 35
8. 0	32. 35
8. 28	32. 5
8. 55	32. 20
9. 9	32. 0
9. 26	32. 5
9. 38	32. 35
9. 52	32. 0
10. 21	32. 0
10. 42	32. 50
11. 8	31. 15
11. 26	31. 5
11. 40	32. 30
11. 57	32. 0
12. 38	32. 30
12. 45	33. 0
12. 59	33. 0
13. 27	33. 30
13. 56	32. 30
14. 10	33. 10
14. 23	32. 55
14. 32	33. 30
15. 56	32. 55
16. 9	33. 20
18. 14	32. 30
18. 27	32. 0
19. 30	32. 5
21. 5	31. 40
23. 59	35. 40
Nov. 20	
0. 0	20. 35. 40
1. 32	35. 30
3. 29	34. 0
5. 39	33. 40
8. 11	32. 40
11. 11	32. 0
11. 26	32. 40
12. 11	32. 20
12. 29	32. 30
13. 11	32. 20
13. 41	33. 10
13. 53	32. 15
16. 11	32. 30
16. 30	32. 10
16. 57	32. 10
17. 11	32. 30
17. 26	32. 0
17. 36	32. 30
18. 7	32. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov. 19	
h m	
0. 0	·1394
0. 32	·1396
2. 22	·1403
3. 40	·1404
4. 9	·1402
5. 18	·1405
8. 10	·1402
8. 30	·1401
9. 6	·1402
10. 27	·1399
10. 45	·1409
11. 12	·1404
11. 59	·1398
12. 25	·1401
16. 0	·1403
17. 37	·1406
21. 4	·1397
22. 18	·1394
23. 59	·1396
Nov. 20	
0. 0	·1396
0. 35	·1400
1. 32	·1403
4. 32	·1405
9. 26	·1402
10. 53	·1399
11. 20	·1400
12. 12	·1398
13. 14	·1399
13. 28	·1400
13. 54	·1397
15. 25	·1401
16. 20	·1404
17. 42	·1408
18. 12	·1413
18. 54	·1414
19. 10	·1416
20. 32	·1410
21. 26	·1402

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Nov. 19	
h m	
0. 0	·03320
9. 3	·03288
10. 35	·03290
10. 54	·03278
18. 25	·03310
23. 59	·03318
Nov. 20	
0. 0	·03318
2. 19	·03346
3. 2	·03339
11. 54	·03328
20. 27	·03296
22. 38	·03271
23. 59	·03275

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 19		
h m	°	°
0. 0	60 ·1	62 ·0
Min.	59 ·2	60 ·6
9. 0	59 ·4	61 ·0
21. 0	60 ·7	62 ·7
Max.	61 ·2	62 ·9
Nov. 20		
1. 0	61 ·3	63 ·6
3. 0	60 ·9	63 ·2
Max.	61 ·6	63 ·7
9. 0	60 ·9	63 ·2
Min.	59 ·8	60 ·9
21. 0	60 ·1	61 ·0

Greenwich Mean Solar Time.	Western Declination.
Nov. 20	
h m	° ′ ″
18. 37	20. 32. 40
19. 41	31. 30
20. 41	31. 10
20. 54	31. 40
21. 0	31. 35
23. 39	35. 40
23. 45	36. 30
23. 59	36. 40
Nov. 21	
0. 0	20. 36. 40
1. 27	37. 0
1. 36	36. 20
2. 39	35. 0
3. 11	35. 0
3. 25	34. 40
4. 28	34. 15
5. 39	34. 0
9. 56	31. 50
11. 10	32. 20
11. 40	32. 0
12. 57	33. 30
13. 38	33. 20
13. 53	32. 55
14. 27	33. 50
14. 41	33. 10
15. 37	33. 50
16. 39	33. 10
16. 42	32. 50
16. 53	33. 15
17. 10	33. 0
17. 28	32. 50
18. 21	33. 0
19. 54	32. 10
20. 14	31. 40
20. 25	32. 0
20. 44	31. 35
22. 36	34. 0
22. 56	34. 25
23. 25	36. 0
23. 59	37. 0
Nov. 22	
0. 0	20. 37. 0
1. 27	38. 50
1. 39	38. 30
2. 7	37. 30
2. 39	37. 0
2. 58	36. 50

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Nov. 20	
h m	
22. 12	·1398
22. 44	·1400
23. 4	·1398
23. 18	·1400
23. 26	·1398
23. 59	·1403
Nov. 21	
0. 0	·1403
0. 49	·1415
1. 15	·1412
1. 24	·1414
1. 29	·1411
1. 42	·1413
2. 40	·1409
2. 55	·1413
3. 24	·1409
3. 27	·1410
3. 49	·1408
4. 42	·1411
4. 54	·1409
5. 2	·1411
5. 42	·1408
5. 53	·1411
6. 13	·1407
7. 12	·1406
7. 58	·1407
8. 51	·1402
8. 56	·1405
9. 13	·1402
10. 8	·1404
11. 18	·1401
11. 55	·1403
12. 53	·1400
13. 49	·1402
14. 27	·1404
15. 30	·1405
17. 22	·1407
18. 4	·1406
19. 20	·1409
20. 0	·1407
20. 25	·1408
21. 40	·1397
23. 0	·1393
23. 12	·1395
23. 31	·1392
23. 50	·1394
23. 59	·1391
Nov. 22	
0. 0	·1391
0. 25	·1394
0. 36	·1389
1. 11	·1393
1. 57	·1399
2. 51	·1402

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Nov. 21	
0. 0	·03275
3. 1	·03311
8. 54	·03310
17. 46	·03281
21. 28	{·03260 {·03241
23. 59	·03240
Nov. 22	
0. 0	·03240
3. 37	·03272
7. 1	·03281
8. 53	·03306
11. 19	·03273
15. 18	·03241

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Nov. 21		
1. 0	60 ·1	61 ·5
3. 0	60 ·6	62 ·0
Max.	61 ·0	62 ·7
9. 0	60 ·1	62 ·5
Min.	59 ·2	61 ·0
21. 0	59 ·6	61 ·5
22. 30	59 ·6	61 ·7
23. 0	59 ·7	61 9
Nov. 22		
0. 0	60 ·0	62 ·0
1. 0	59 ·6	62 ·4
2. 0	60 ·3	62 ·4
3. 0	60 ·4	62 ·4
Max.	61 ·2	63 ·0
9. 0	60 ·5	62 ·9

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.22		Nov.22		Nov.22		Nov.22		
h m	° ′ ″	h m		h m		h m	°	°
3. 13	20. 36. 20	3. 15	·1399	15. 31	·03253	Min.	59 ·2	61 ·5
3. 42	36. 5	3. 49	·1403	17. 19	·03237	21. 0	59 ·6	62 ·0
3. 59	37. 0	4. 11	·1399	17. 56	·03244	22. 0	59 ·6	62 ·0
4. 53	35. 25	4. 39	·1399	20. 57	·03227	23. 0	59 ·6	62 ·0
5. 51	36. 35	4. 49	·1398	23. 59	·03231			
6. 16	35. 0	5. 15	·1400					
6. 26	35. 15	5. 27	·1404					
6. 39	34. 30	5. 51	·1399					
6. 51	34. 40	6. 25	·1399					
7. 12	30. 20	6. 43	·1394					
7. 30	30. 35	6. 51	·1396					
7. 42	30. 30	6. 59	·1386					
7. 57	31. 55	7. 22	·1389					
8. 27	28. 50	7. 29	·1387					
8. 40	30. 0	7. 43	·1389					
8. 57	28. 55	7. 57	·1383					
9. 23	27. 20	8. 11	·1385					
9. 36	28. 15	8. 27	·1381					
9. 52	31. 0	8. 39	·1382					
9. 58	31. 35	9. 0	·1376					
10. 38	31. 35	9. 35	·1385					
10. 44	31. 5	9. 41	·1384					
10. 57	31. 30	9. 59	·1391					
11. 14	31. 50	10. 6	·1388					
11. 28	31. 25	10. 20	·1389					
11. 39	32. 30	10. 26	·1394					
11. 57	32. 45	10. 42	·1391					
12. 18	30. 50	11. 14	·1393					
12. 50	33. 10	11. 26	·1392					
12. 53	33. 50	11. 41	·1405					
13. 13	33. 15	12. 11	·1396					
13. 26	33. 40	12. 24	·1397					
13. 40	33. 40	12. 35	·1393					
13. 44	34. 25	12. 42	·1395					
13. 54	33. 40	12. 52	·1392					
14. 11	34. 30	13. 0	·1395					
14. 36	33. 55	13. 18	·1398					
14. 42	33. 55	13. 24	·1395					
14. 46	32. 10	13. 33	·1399					
15. 0	28. 50	13. 42	·1398					
15. 9	28. 50	13. 53	·1400					
15. 14	27. 40	14. 5	·1397					
15. 27	32. 30	14. 24	·1402					
15. 51	34. 0	14. 54	·1405					
15. 56	33. 30	15. 6	·1403					
16. 10	32. 30	15. 23	·1396					
16. 22	33. 10	15. 34	·1402					
16. 37	33. 10	15. 45	·1399					
16. 41	33. 40	15. 55	·1401					
16. 53	33. 15	16. 15	·1397					
17. 6	33. 15	16. 34	·1401					
17. 9	31. 40	17. 24	·1399					
17. 22	30. 50	17. 40	·1404					
17. 27	31. 50	17. 54	·1400					
17. 40	32. 50	17. 57	·1404					
17. 45	32. 50	18. 23	·1399					
17. 56	34. 30	18. 26	·1401					
18. 8	33. 0	18. 32	·1399					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.22		Nov.22						
h m	° ′ ″	h m		h m		h m	°	°
18. 11	20. 33. 0	18. 50	·1400					
18. 30	31. 45	19. 10	·1397					
18. 54	32. 10	19. 12	·1400					
18. 59	31. 35	19. 16	·1397					
19. 11	33. 0	19. 26	·1400					
19. 13	31. 50	19. 40	·1399					
19. 27	33. 10		* * *					
19. 53	32. 0	20. 26	·1401					
19. 57	31. 40	20. 40	·1397					
20. 10	32. 40	20. 44	·1399					
20. 16	32. 20	20. 53	·1393					
20. 28	32. 35	21. 11	·1399					
20. 39	32. 10	21. 22	·1395					
20. 44	32. 40	21. 42	·1391					
20. 55	31. 30	22. 0	·1396					
21. 10	33. 0	22. 13	·1390					
21. 28	32. 10	22. 41	·1393					
21. 39	33. 0	22. 54	·1389					
21. 43	32. 30	23. 10	·1392					
22. 3	33. 30	23. 19	·1388					
22. 12	32. 40	23. 52	·1391					
23. 14	35. 0	23. 59	·1392					
23. 36	34. 50							
23. 53	36. 30							
23. 57	36. 30							
23. 59	37. 0							
Nov.23		Nov.23		Nov.23		Nov.23		
0. 0	20. 37. 0	0. 0	·1392	0. 0	·03231	0. 0	59 ·7	62 ·2
0. 9	38. 20	0. 10	·1395	0. 56	·03248	1. 0	60 ·6	62 ·1
0. 22	38. 30	0. 19	·1393	4. 26	·03278	3. 0	60 ·6	62 ·4
0. 50	35. 40	0. 30	·1396	4. 38	·03289	Max.	61 ·0	63 ·4
0. 58	37. 15	0. 40	·1398	13. 9	·03276	9. 0	60 ·6	63 ·0
1. 16	38. 0	0. 51	·1390	13. 57	·03267	Min.	59 ·7	62 ·0
	* * *	1. 2	·1398	18. 25	·03271	21. 0	60 ·2	62 ·5
1. 43	36. 30	1. 22	·1394	21. 39	·03254			
	* * *	1. 27	·1398	23. 59	·03250			
2. 38	37. 55	1. 37	·1394					
3. 0	36. 10	1. 41	·1398					
3. 9	36. 15	2. 2	·1394					
3. 15	37. 10	2. 24	·1396					
3. 26	36. 30	2. 44	·1392					
3. 29	36. 55	2. 57	·1393					
3. 54	36. 30	3. 13	·1396					
4. 1	36. 30	3. 26	·1393					
4. 23	34. 40	3. 40	·1395					
4. 32	32. 0	3. 44	·1393					
4. 44	32. 10	4. 1	·1394					
5. 9	34. 0	4. 26	·1381					
5. 13	33. 50	4. 45	·1392					
5. 26	34. 30	5. 13	·1400					
5. 33	34. 20	5. 34	·1398					
5. 46	35. 20	5. 40	·1399					
6. 29	33. 25	5. 54	·1392					
7. 9	33. 40	6. 25	·13 6					
7. 21	32. 55	6. 42	·1398					
7. 26	33. 5	7. 8	·1391					
7. 39	32. 40	7. 40	·1394					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 23		Nov. 23						
h m	° ′ ″	h m		h m		h m		
7. 50	20. 31. 25	7. 55	·1397					
8. 11	33. 10	8. 54	·1396					
9. 4	31. 15	9. 14	·1398					
9. 11	31. 15	9. 26	·1395					
9. 24	30. 0	9. 52	·1398					
9. 39	28. 55	10. 47	·1393					
9. 56	30. 30	11. 19	·1401					
10. 8	30. 20	11. 41	·1399					
10. 38	31. 30	11. 49	·1392					
10. 44	31. 0	12. 4	·1390					
11. 9	29. 45	12. 14	·1392					
11. 24	28. 10	12. 26	·1392					
11. 39	31. 10	12. 42	·1387					
11. 44	31. 10	12. 57	·1388					
11. 57	30. 0	13. 38	·1399					
12. 11	31. 0	14. 9	·1395					
12. 29	31. 0	14. 22	·1398					
12. 41	30. 30	14. 30	·1393					
12. 51	31. 10	14. 57	·1394					
12. 59	30. 25	15. 55	·1398					
13 12	32. 30	16. 6	·1395					
13. 24	32. 55	16. 20	·1399					
13. 34	33. 40	16. 40	·1397					
13. 42	33. 15	17. 11	·1398					
13. 53	33. 15	17. 19	·1401					
14. 6	32. 10	17. 41	·1399					
14. 13	32. 10	17. 53	·1401					
14. 26	31. 30	18. 49	·1399					
14. 56	32. 45	19. 29	·1401					
15. 9	33. 20	20. 9	·1399					
15. 39	33. 30	20. 26	·1396					
15. 53	33. 0	20. 36	·1399					
15. 56	33. 40	20. 41	·1396					
16. 5	32. 30	23. 23	·1391					
16. 13	32. 50	23. 34	·1394					
16. 24	33. 40	23. 43	·1392					
16. 38	32. 40	23. 59	·1395					
16. 41	33. 5							
16. 47	32. 40							
16. 56	33. 5							
17. 10	32. 15							
17. 24	33. 5							
17. 28	32. 30							
17. 36	32. 50							
17. 41	32. 15							
17. 58	33. 10							
18. 11	32. 15							
18. 41	33. 0							
19. 54	32. 50							
20. 9	32. 10							
20. 15	32. 40							
20. 24	31. 55							
20. 38	32. 40							
20. 59	32. 20							
22. 14	34. 0							
23. 2	35. 30							
23. 11	35. 0							
23. 23	35. 25							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 23								
h m	° ′ ″	h m		h m		h m	°	°
23. 26	20. 35. 0							
23. 41	36. 50							
23. 49	35. 55							
23. 59	36. 5							
Nov. 24		Nov. 24		Nov. 24		Nov. 24		
0. 0	20. 36. 5	0. 0	·1395	0. 0	·03250	1. 0	60·8	62·9
0. 30	36. 50	0. 23	·1396	7. 44	·03290	3. 0	60·7	63·1
0. 39	36. 20	0. 34	·1398	8. 3	·03281	Max.	61·2	63·7
0. 58	36. 40	0. 43	·1397	8. 34	·03293	9. 0	60·6	63·0
1. 9	37. 10	1. 10	·1402	10. 14	·03277	Min.	59·5	61·4
1. 25	36. 50	1. 21	·1398	14. 7	·03263	21. 0	60·1	62·0
1. 43	36. 55	1. 50	·1400	14. 41	·03250			
1. 56	36. 10	2. 6	·1401	23. 59	·03236			
2. 4	36. 20	2. 13	·1399					
2. 11	36. 0	2. 27	·1403					
2. 39	36. 0	2. 56	·1400					
2. 53	35. 20	3. 11	·1401					
3. 12	36. 0	3. 23	·1398					
3. 39	35. 30	3. 51	·1400					
4. 11	36. 10	4. 13	·1398					
4. 25	34. 55	4. 40	·1400					
4. 56	34. 20	4. 56	·1399					
6. 37	34. 20	5. 34	·1399					
6. 56	34. 35	5. 44	·1402					
7. 12	34. 0	6. 15	·1398					
7. 24	34. 40	6. 44	·1400					
7. 38	33. 40	7. 8	·1396					
7. 53	33. 40	7. 35	·1394					
8. 12	27. 15	8. 4	·1388					
8. 27	29. 30	8. 39	·1402					
8. 56	32. 0	8. 43	·1399					
9. 31	31. 45	8. 49	·1401					
9. 51	31. 5	9. 41	·1387					
10. 9	31. 40	10. 11	·1395					
10. 16	30. 35	10. 23	·1393					
10. 38	31. 40	10. 49	·1388					
10. 56	31. 0	11. 11	·1392					
11. 17	31. 20	11. 22	·1389					
11. 41	32. 30	11. 39	·1389					
11. 52	32. 5	11. 50	·1392					
12. 8	32. 30	12. 20	·1393					
12. 41	32. 20	12. 26	·1395					
13. 8	33. 40	12. 50	·1391					
13. 38	32. 50	14. 0	·1393					
13. 53	33. 20	14. 24	·1399					
14. 23	37. 55	14. 48	·1396					
14. 42	33. 35	15. 40	·1395					
15. 8	32. 30	17. 33	·1399					
15. 23	33. 40	18. 30	·1403					
15. 27	33. 20	18. 41	·1400					
15. 41	33. 35	19. 49	·1403					
15. 55	33. 25	21. 15	·1398					
16. 11	33. 10	21. 24	·1403					
16. 27:	32. 20	21. 42	·1397					
17. 8	33. 20	22. 13	·1393					
17. 57	33. 20	22. 27	·1395					
18. 9	32. 50	22. 54	·1393					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.24		Nov.24						
h m	° ′ ″	h m						
18. 23	20. 33. 20	23. 32	·1394					
18. 40	33. 0	23. 59	·1398					
18. 54	33. 20							
20. 39	32. 55							
22. 11	34. 0							
23. 7	35. 30							
23. 59	36. 20							
Nov.25		Nov.25		Nov.25		Nov.25		
0. 0	20. 36. 20	0. 0	·1398	0. 0	·03236	1. 0	60·1	62·0
0. 23	36. 50	0. 24	·1400	2. 48	·03250	3. 0	60·6	62·0
1. 58	35. 10	1. 15	·1403	8. 54	·03264	Max.	61·0	63·2
2. 10	35. 20	2. 16	·1400	10. 9	·03250	9. 0	60·1	62·0
2. 13	34. 40	2. 30	·1403	12. 11	·03237	Min.	59·8	62·0
2. 28	34. 55	3. 12	·1398	20. 32	·03236	22. 0	60·0	62·1
3. 9	34. 15	3. 27	·1400	22. 6	·03219			
3. 16	33. 55	3. 30	·1388	23. 59	·03221			
3. 28	34. 15	3. 39	·1400					
3. 59	34. 10	4. 34	·1399					
4. 11	33. 50	6. 0	·1401					
5. 13	34. 0	6. 19	·1399					
5. 38	33. 40	6. 27	·1400					
6. 23	33. 30	7. 10	·1395					
6. 41	33. 55	7. 26	·1397					
6. 56	33. 25	8. 55	·1396					
7. 21	32. 55	9. 7	·1401					
7. 43	33. 20	9. 15	·1396					
7. 56	32. 55	9. 52	·1410					
8. 33	32. 30	10. 14	·1402					
9. 14	33. 0	10. 44	·1395					
9. 37	29. 25	11. 11	·1398					
9. 45	29. 55	11. 53	·1396					
10. 9	28. 50	16. 13	·1400					
10. 23	31. 20	17. 52	·1403					
10. 40	32. 25	18. 40	·1405					
10. 57	32. 30	22. 0	·1398					
11. 10	32. 55	23. 19	·1396					
11. 26	32. 45	23. 59	·1400					
11. 28	32. 55							
12. 51	33. 0							
14. 53	33. 10							
15. 8	32. 55							
16. 7	33. 0							
16. 26	33. 20							
17. 12	33. 10							
17. 55	33. 35							
18. 39	33. 5							
19. 29	33. 30							
19. 43	33. 15							
20. 29	33. 40							
20. 45	33. 15							
20. 58	33. 40							
23. 41	36. 25							
23. 59	36. 15							
Nov.26		Nov.26		Nov.26		Nov.26		
0. 0	20. 36. 15	0. 0	·1400	0. 0	·03221	1. 0	60·6	61·5
0. 27	35. 50	0. 44	·1398	10. 25	·03243	Max.	61·1	63·2

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.26		Nov.26		Nov.26		Nov.26		
h m	° ′ ″	h m		h m		h m	°	°
0. 53	20. 36. 5	1. 12	·1403	15. 15	·03210	8. 0	60·1	62·0
1. 28	35. 20	1. 23	·1400	21. 39	·03142	Min.	57·6	59·0
2. 9	35. 0	2. 42	·1404	22. 4	·03140	21. 0	57·8	59·0
2. 36	35. 35	3. 11	·1403	23. 59	·03210			
2. 41	35. 10	3. 41	·1405					
4. 9	34. 55	3. 57	·1403					
4. 26	35. 30	4. 39	·1407					
4. 35	35. 0	4. 53	·1405					
4. 56	36. 15	5. 23	·1400					
5. 4	36. 0	6. 36	·1405					
5. 18	36. 10	7. 11	·1399					
6. 9	34. 40	7. 25	·1401					
6. 27	34. 30	7. 40	·1399					
6. 39	34. 50	7. 55	·1409					
6. 51	33. 30	8. 10	·1408					
7. 11	34. 10	8. 22	·1396					
7. 38	33. 40	8. 52	·1399					
7. 53	31. 10	9. 13	·1396					
8. 9	33. 20	10. 0	·1398					
8. 28	32. 20	10. 15	·1399					
8. 41	32. 10	10. 26	·1396					
9. 9	33. 5	10. 54	·1399					
9. 21	32. 10	11. 3	·1397					
9. 42	31. 30	11. 15	·1400					
9. 56	32. 30	11. 26	·1398					
10. 6	31. 55	12. 40	·1399					
10. 22	32. 50	14. 18	·1397					
10. 26	32. 0	16. 32	·1403					
10. 43	31. 50	17. 15	·1403					
10. 55	32. 5	20. 10	·1410					
11. 8	31. 20	20. 39	·1408					
11. 14	32. 10	20. 53	·1410					
16. 53	32. 30	21. 6	·1408					
17. 4	32. 50	21. 10	·1413					
20. 10	32. 50	21. 41	·1406					
20. 53	32. 40	21. 46	·1408					
22. 27	33. 50		* * *					
23. 11	35. 10	22. 41	·1401					
23. 56	35. 30	23. 27	·1403					
23. 59	35. 40	23. 59	·1400					
Nov.27		Nov.27		Nov.27		Nov.27		
0. 0	20. 35. 40	0. 0	·1400	0. 0	·03210	1. 0	61·3	62·8
1. 10	36. 10	0. 24	·1405	9. 1	·03291	3. 0	61·0	63·0
1. 40	35. 0	1. 6	·1408	17. 56	·03210	Max.	61·7	63·7
1. 53	35. 10	1. 41	·1404		* * *	9. 0	61·6	63·6
2. 4	34. 40	1. 57	·1405	18. 40	·03192	Min.	59·1	61·5
2. 25	35. 25	3. 26	·1400	18. 57	·03203	21. 0	59·7	61·8
2. 41	35. 0	4. 35	·1402	20. 9	·03191			
3. 41	35. 15	4. 54	·1401	20. 38	·03213			
4. 11	34. 40	5. 4	·1405	23. 59	·03210			
4. 27	34. 40	5. 13	·1402					
4. 39	34. 20	5. 27	·1406					
5. 13	34. 40	6. 11	·1398					
5. 26	34. 10	7. 12	·1401					
5. 33	34. 30	8. 11	·1400					
5. 43	33. 50	8. 53	·1403					
5. 56	34. 5	9. 25	·1399					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.27		Nov.27						
h m	° ′ ″	h m		h m		h m	°	
6. 11	20. 34. 5	9. 34	·1401					
6. 26	33. 45	10. 24	·1397					
6. 44	34. 10	11. 2	·1402					
7. 10	33. 10	11. 30	·1399					
7. 56	33. 20	11. 44	·1400					
10. 9	31. 50	11. 56	·1399					
10. 53	32. 0	12. 19	·1402					
10. 58	31. 50	12. 41	·1399					
11. 12	32. 10	12. 55	·1402					
11. 30	31. 55	13. 13	·1400					
11. 43	32. 5	14. 27	·1405					
11. 58	31. 55	15. 10	·1404					
12. 42	33. 30	15. 19	·1411					
13. 9	33. 10	15. 24	·1409					
14. 26	33. 25	16. 23	·1413					
14. 40	33. 5	16. 30	·1410					
15. 8	33. 10	16. 36	·1413					
15. 12	34. 5	16. 52	·1414					
15. 14	32. 55	17. 30	·1407					
15. 39	33. 0	17. 49	·1404					
15. 56	32. 30	17. 55	·1409					
16. 52	32. 30	18. 0	·1406					
16. 57	32. 5	18. 12	·1415					
17. 9	32. 40	18. 30	·1419					
17. 12	32. 30	18. 52	·1404					
17. 27	34. 30	19. 18	·1419					
17. 42	37. 0	20. 12	·1382					
17. 47	38. 30	20. 23	·1364					
17. 58	36. 30	20. 31	·1365					
	***	20. 45	·1383					
18. 42	32. 50	20. 55	·1379					
18. 57	34. 25	21. 2	·1382					
19. 11	35. 0	21. 7	·1378					
19. 38	38. 5	21. 36	·1395					
19. 49	37. 30	21. 44	·1394					
20. 11	33. 10	21. 47	·1396					
	***	22. 26	·1395					
20. 36	34. 15	22. 40	·1399					
20. 52	40. 0	22. 44	·1398					
21. 9	42. 30	22. 55	·1399					
21. 12	44. 0	23. 7	·1397					
21. 28	40. 15	23. 15	·1401					
22. 13	35. 50	23. 42	·1397					
22. 39	38. 55	23. 45	·1399					
22. 43	37. 10	23. 59	·1395					
23. 0	37. 10							
23. 11	36. 40							
23. 30	37. 10							
23. 40	36. 50							
23. 55	37. 10							
23. 59	36. 15							
Nov.28		Nov.28		Nov.28		Nov.28		
0. 0	20. 36. 15	0. 0	·1395	0. 0	·03210	Min.	59 ·8	61 ·8
0. 13	37. 50	0. 10	·1400	2. 13	·03235	1. 0	59 ·8	61 ·9
0. 25	36. 20	0. 57	·1397	3. 52	·03332	3. 0	60 ·1	62 ·0
1. 9	35. 30	1. 42	·1400	4. 41	·03291	9. 0	60 ·6	62 ·0
1. 37	38. 20	2. 7	·1388	8. 38	·03291	Max.	61 ·0	63 ·3
1. 42	38. 0	2. 15	·1389	9. 41	·03186	21. 0	60 ·6	62 ·5

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.28		Nov.28		Nov.28		Nov.28		
h m	° ′ ″	h m		h m		h m	°	°
1. 46	20. 38. 50	2. 34	·1380	10. 6	·03201	22. 0	60 ·6	62 ·6
2. 0	38. 0	2. 43	·1353	10. 14	·03191	23. 0	60 ·3	62 ·4
2. 11	37. 10	2. 48	·1351	10. 41	·03232			
2. 23	38. 50	3. 2	·1340	12. 27	·03238			
2. 26	42. 50	3. 16	·1357	12. 39	·03229			
2. 32	42. 15	3. 23	·1354	13. 32	·03223			
2. 39	42. 40	3. 45	·1382	14. 6	·03210			
2. 56	35. 40	3. 56	·1369	14. 44	·03210			
3. 10	37. 40	4. 8	·1366	15. 11	·03202			
3. 21	35. 0	4. 14	·1373	18. 47	·03227			
3. 28	32. 30	4. 24	·1366	20. 9	·03231			
3. 52	40. 0	4. 45	·1376	23. 59	·03242			
3. 56	38. 0	4. 53	·1375					
3. 58	36. 50	5. 12	·1380					
4. 11	38. 50	5. 25	·1371					
4. 18	37. 30	5. 36	·1382					
4. 27	36. 55	5. 47	·1373					
4. 40	37. 30	5. 56	·1372					
4. 56	36. 10	6. 15	·1379					
5. 9	36. 40	6. 25	·1375					
5. 15	33. 30	6. 39	·1380					
5. 27	34. 15	7. 17	·1376					
5. 41	31. 50	7. 27	·1381					
5. 44	31. 55	7. 56	·1374					
5. 56	30. 15	8. 14	·1379					
6. 6	30. 0	8. 18	·1376					
6. 11	30. 50	8. 33	·1377					
6. 23	30. 50	8. 54	·1387					
6. 39	34. 20	9. 11	·1403					
6. 53	34. 50	9. 15	·1399					
6. 59	33. 10	9. 27	·1412					
7. 12	30. 20	9. 40	·1427					
7. 24	31. 15	9. 42	·1434					
7. 28	30. 40	9. 55	·1395					
7. 42	31. 5	10. 7	·1403					
7. 52	30. 50	10. 23	·1361					
8. 6	32. 25	10. 28	·1359					
8. 11	32. 0	10. 51	·1386					
8. 24	32. 40	11. 10	·1372					
8. 42	29. 50	11. 13	·1378					
8. 54	29. 10	11. 22	·1377					
9. 6	31. 0	11. 55	·1384					
9. 18	20. 55	12. 15	·1381					
9. 26	23. 0	12. 41	·1395					
9. 36	30. 0	12. 52	·1390					
9. 42	23. 0	12. 57	·1390					
10. 6	30. 25	13. 13	·1384					
10. 23	23. 10	13. 28	·1383					
10. 38	29. 0	13. 48	·1389					
10. 46	31. 50	13. 57	·1387					
10. 55	29. 45	14. 12	·1388					
11. 6	30. 40	14. 28	·1382					
11. 11	30. 40	14. 36	·1385					
11. 23	31. 40	15. 2	·1378					
11. 31	30. 55	15. 22	·1366					
11. 42	28. 40	15. 52	·1384					
12. 0	29. 10	15. 56	·1383					
12. 12	30. 25	16. 20:	·1394					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.	Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.28		Nov.28							Nov.29		Nov.29		Nov.29		Nov.29		
h m	° ′ ″	h m		h m		h m	°		h m		h m		h m		h m	°	°
12. 22	20. 30. 15	16. 27	·1392						0. 0	20. 36. 40	0. 0	·1384	0. 0	·03242	0. 0	60·5	62·5
12. 27	31. 10	16. 37	·1397						0. 41	36. 55	0. 49	·1392	2. 2	·03251	1. 0	60·7	62·9
12. 51	29. 30	16. 46	·1392						0. 43	36. 5	1. 0	·1391	2. 36	·03262	2. 0	60·6	62·7
13. 8	29. 40	17. 8	·1389						0. 56	37. 5	1. 25	·1395	4. 53	·03302	3. 0	60·6	62·7
13. 24	32. 0	17. 40	·1391						1. 0	36. 20	2. 17	·1397	5. 9	·03296	Max.	61·0	63·5
13. 37	33. 30	17. 44	·1396						1. 36	37. 0	2. 26	·1393	5. 32	·03310	9. 0	60·3	62·1
13. 43	33. 0	18. 10	·1384						2. 6	35. 40	2. 43	·1390	6. 13	·03281	Min.	59·3	61·3
13. 53	31. 50	18. 18	·1385						2. 43	38. 15	3. 3	·1381	11. 52	·03252	21. 0	59·8	61·6
14. 23	29. 15	18. 28	·1389						2. 56	37. 40	3. 13	·1353	21. 38	·03195	22. 0	59·8	61·6
14. 37	32. 5	18. 44	·1380						3. 8	37. 10	3. 24	·1365	23. 59	·03209	23. 0	59·9	61·6
14. 42	34. 40	19. 21	·1383						3. 13	33. 55	3. 40	·1357					
14. 52	33. 40	19. 56	·1383						3. 26	35. 5	3. 44	·1363					
15. 8	35. 30	20. 10	·1393						3. 42	29. 15	3. 55	·1371					
15. 11	34. 50	20. 13	·1384						3. 53	30. 50	4. 10	·1368					
15. 18	35. 10	20. 39	·1387						3. 56	30. 30	4. 21	·1372					
15. 26	36. 25	20. 53	·1381						4. 6	30. 55	4. 29	·1371					
15. 38	36. 15	21. 0	·1385						4. 11	29. 40	4. 49	·1382					
15. 42	36. 50								4. 26	29. 5	5. 6	·1367					
15. 51	35. 0	21. 19	·1380						4. 43	31. 40	5. 12	·1371					
15. 56	34. 30	21. 29	·1384						4. 55	31. 55	5. 18	·1364					
16. 9	34. 30	21. 40	·1381						5. 6	27. 55	5. 36	·1389					
16. 23	32. 50	21. 43	·1386						5. 10	28. 5	5. 41	·1385					
16. 27	34. 10	21. 49	·1381						5. 23	23. 0	5. 55	·1391					
16. 38	33. 50	22. 12	·1379						5. 38	29. 40	6. 10	·1384					
16. 42	34. 25	22. 21	·1381						5. 40	29. 0	6. 16	·1394					
16. 57	34. 0	22. 43	·1378						5. 43	29. 40	6. 25	·1394					
17. 12	35. 0	22. 54	·1382						5. 56	29. 0	6. 44	·1380					
17. 25	34. 40	23. 0	·1376						6. 9	25. 40	7. 0	·1385					
17. 28	34. 0	23. 14	·1381						6. 22	28. 0	7. 10	·1384					
17. 43	32. 55	23. 17	·1377						6. 31	32. 10	7. 24	·1388					
17. 55	34. 20	23. 35	·1383						6. 43	33. 15	7. 43	·1382					
18. 11	34. 35	23. 59	·1384						6. 52	32. 0	8. 11	·1386					
18. 13	34. 10								6. 58	32. 30	8. 15	·1388					
18. 23	35. 10								7. 12	32. 20	8. 34	·1384					
18. 38	33. 20								7. 22	31. 45	8. 55	·1388					
18. 41	33. 40								7. 36	32. 40	9. 33	·1386					
19. 4	32. 50								7. 53	32. 20	9. 53	·1390					
19. 25	33. 20								8. 12	33. 30	11. 11	·1388					
19. 37	33. 10								8. 41	31. 50	11. 39	·1391					
19. 56	33. 20								9. 11	33. 0	11. 46	·1395					
19. 58	35. 5								9. 23	31. 55	12. 39	·1392					
20. 8	33. 30								9. 39	31. 10	12. 56	·1390					
20. 23	34. 15								9. 42	31. 35	14. 58	·1393					
20. 39	33. 40								9. 53	31. 30	15. 10	·1392					
20. 53	33. 25								10. 9	32. 40	15. 26	·1394					
20. 57	33. 0								10. 38	32. 0	16. 30	·1393					
21. 8	34. 40								10. 43	32. 50	17. 45	·1397					
21. 23	33. 15								11. 27	33. 5	18. 18	·1394					
21. 31	34. 20								11. 42	34. 15	19. 14	·1396					
21. 54	34. 0								11. 56	33. 5	20. 10	·1390					
22. 9	34. 30								12. 11	33. 25	21. 25	·1391					
22. 31	36. 0								12. 39	33. 25	22. 57	·1394					
22. 43	36. 15								12. 57	34. 0	23. 29	·1393					
22. 49	36. 5								13. 27	34. 20	23. 59	·1396					
22. 57	34. 20								13. 40	34. 10							
23. 12	35. 5								14. 11	33. 25							
23. 22	34. 45								14. 27	33. 40							
23. 59	36. 40								15. 55	33. 50							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Nov.29								
h m	° ′ ″	h m		h m		h m	°	
16. 38	20. 33. 40							
16. 45	33. 0							
17. 16	33. 10							
17. 40	33. 0							
17. 44	33. 50							
17. 56	33. 0							
18. 9	33. 10							
18. 16	32. 40							
18. 26	32. 40							
18. 40	32. 10							
18. 44	32. 40							
18. 56	32. 20							
19. 10	33. 0							
19. 31	32. 20							
19. 53	32. 50							
19. 58	32. 50							
20. 8	32. 30							
20. 16	33. 0							
20. 37	32. 40							
20. 58	33. 0							
22. 27	34. 30							
22. 43	35. 10							
22. 58	35. 10							
23. 9	36. 30							
23. 26	35. 30							
23. 29	36. 10							
23. 40	35. 50							
23. 56	37. 20							
23. 59	37. 40							
Nov.30		Nov.30		Nov.30		Nov.30		
0. 0	20. 37. 40	0. 0	·1396	0. 0	·03209	0. 0	60·2	61·8
0. 4	37. 10	0. 26	·1398	2. 57	·03250	1. 0	60·6	62·2
0. 25	36. 0	1. 10	·1394	6. 39	·03243	2. 0	60·2	62·2
0. 55	38. 0	1. 56	·1383	6. 54	·03251	3. 0	60·6	62·9
0. 57	37. 0	2. 10	·1384	7. 26	·03240	Max.	60·8	63·4
1. 10	36. 20	2. 27	·1383	11. 53	·03236	9. 0	59·8	62·0
1. 43	37. 50	2. 42	·1379	12. 31	·03221	Min.	59·4	61·4
1. 53	37. 10	3. 6	·1386	12. 46	·03230	21. 0	59·8	62·0
2. 25	37. 0	3. 36	·1377	13. 41	·03209			
2. 39	35. 30	3. 53	·1384	14. 21	·03221			
2. 45	32. 30	3. 58	·1382	14. 51	·03206			
2. 56	32. 30	4. 12	·1385	15. 56	·03221			
3. 12	35. 20	4. 19	·1381	23. 59	·03211			
3. 27	36. 5	4. 39	·1388					
3. 37	35. 10	4. 48	·1386					
3. 42	35. 10	5. 24	·1390					
3. 45	35. 45	5. 56	·1394					
3. 56	35. 35	6. 21	·1386					
4. 11	34. 10	6. 48	·1395					
4. 24	33. 0	7. 25	·1388					
4. 40	34. 30	7. 56	·1396					
4. 53	34. 5	8. 23	·1392					
5. 8	34. 40	8. 50	·1393					
5. 17	34. 5	9. 0	·1396					
6. 12	33. 10	9. 19	·1391					
6. 37	28. 45	9. 30	·1393					
6. 44	30. 50	9. 50	·1389					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Nov.30		Nov.30						
h m	° ′ ″	h m						
6. 57	20. 32. 50	10. 0	·1392					
7. 9	33. 5	10. 12	·1389					
7. 12	32. 0	10. 30	·1396					
7. 36	30. 0	10. 44	·1393					
7. 53	31. 40	10. 54	·1398					
7. 58	32. 10	11. 15	·1390					
8. 10	31. 40	11. 40	·1391					
8. 23	32. 50	11. 44	·1397					
8. 42	32. 15	12. 2	·1398					
9. 13	32. 45	12. 14	·1399					
9. 26	31. 50	12. 40	·1393					
9. 51	31. 50	12. 52	·1397					
9. 58	32. 10	13. 3	·1394					
10. 12	31. 30	13. 16	·1396					
10. 56	32. 40	13. 42	·1386					
10. 59	31. 50	14. 11	·1391					
11. 12	31. 10	14. 16	·1393					
11. 31	31. 50	14. 25	·1399					
11. 47	34. 10	14. 40	·1397					
12. 26	30. 20	14. 47	·1392					
12. 38	30. 50	14. 59	·1395					
12. 52	34. 20	15. 34	·1387					
13. 7	34. 0	15. 44	·1391					
13. 14	33. 10	15. 50	·1389					
13. 23	33. 40	16. 10	·1392					
13. 31	32. 55	16. 25	·1389					
13. 42	31. 15	16. 50	·1395					
13. 54	31. 25	17. 9	·1399					
14. 7	33. 15	17. 41	·1392					
14. 23	38. 0	18. 9	·1397					
14. 28	35. 10	18. 44	·1390					
14. 41	32. 50	19. 12	·1396					
14. 43	32. 50	19. 41	·1394					
14. 53	31. 30	19. 52	·1397					
15. 8	30. 40		***					
15. 14	32. 0	20. 43	·1393					
15. 32	33. 0	21. 12	·1396					
15. 40	33. 40	22. 10	·1391					
15. 43	34. 55	23. 59	·1392					
16. 0	34. 10							
16. 10	34. 40							
16. 26	32. 45							
16. 39	33. 20							
16. 56	32. 20							
17. 4	32. 50							
17. 11	32. 35							
17. 21	33. 0							
17. 26	32. 15							
17. 41	33. 20							
17. 55	32. 50							
18. 12	34. 0							
18. 56	32. 20							
	***							
19. 57	33. 0							
20. 11	32. 10							
20. 17	32. 10							
20. 26	31. 50							
20. 32	32. 15							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 30								
h m	° ′ ″	h m		h m		h m	°	°
20. 42	20. 31. 40							
20. 53	32. 15							
21. 10	33. 0							
21. 23	32. 40							
23. 11	35. 0							
23. 26	35. 50							
23. 51	35. 0							
23. 56	35. 55							
23. 59	35. 40							
Dec. 1		Dec. 1		Dec. 1		Dec. 1		
0. 0	20. 35. 40	0. 0	·1392	0. 0	·03211	1. 0	60·5	62·0
0. 44	36. 30	0. 30	·1400	4. 56	·03242	3. 0	60·6	62·0
0. 57	37. 5	1. 25	·1402	5. 12	·03236	Max.	61·1	63·0
1. 8	36. 25	1. 42	·1399	5. 38	·03253	9. 0	60·6	62·7
1. 27	36. 15	2. 15	·1396	6. 26	·03247	Min.	59·0	60·0
1. 39	37. 0	2. 29	·1399	16. 1	·03216	21. 0	59·3	60·5
1. 54	35. 55	3. 0	·1394	17. 19	·03185			
1. 58	35. 55	3. 15	·1396	18. 8	·03193			
2. 25	34. 30	3. 29	·1393	23. 59	·03180			
2. 42	34. 20	3. 46	·1395					
2. 56	35. 0	4. 19	·1391					
3. 23	35. 0	4. 26	·1392					
3. 37	34. 10	4. 44	·1387					
3. 42	34. 25	4. 52	·1390					
3. 56	34. 5	5. 10	·1386					
4. 9	33. 15	5. 19	·1370					
4. 26	34. 45	5. 43	·1396					
4. 42	34. 35	6. 25	·1395					
4. 53	34. 10	6. 41	·1392					
4. 57	34. 50	7. 11	·1387					
5. 10	34. 20	7. 26	·1390					
5. 28	23. 0	7. 59	·1389					
5. 56	29. 50	8. 41	·1391					
6. 11	31. 10	9. 13	·1395					
6. 21	31. 10	9. 40	·1391					
6. 28	31. 40	9. 53	·1393					
6. 39	31. 40	10. 10	·1391					
6. 44	32. 5	10. 28	·1395					
6. 55	33. 0	10. 52	·1394					
7. 9	33. 40	11. 44	·1395					
	***	12. 2	·1396					
7. 59	33. 0	12. 26	·1395					
8. 27	31. 15	14. 6	·1398					
8. 39	32. 20	15. 12	·1402					
8. 57	32. 5	15. 52	·1398					
9. 8	33. 0	16. 38	·1409					
9. 14	32. 50	17. 12	·1419					
10. 32	34. 0	17. 55	·1404					
10. 57	33. 45	18. 15	·1403					
11. 43	33. 55	18. 25	·1406					
11. 59	34. 15	18. 43	·1403					
13. 25	34. 0	18. 51	·1405					
13. 37	34. 15	19. 5	·1406					
14. 8	33. 45	19. 25	·1399					
14. 25	34. 20	19. 42	·1394					
14. 39	33. 50	19. 53	·1398					
15. 0	34. 0	20. 14	·1399					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 1		Dec. 1						
h m	° ′ ″	h m		h m		h m	°	°
15. 19	20. 32. 55	20. 40	·1387					
15. 39	32. 55	21. 0	·1385					
16. 13	37. 20	21. 12	·1394					
16. 26	37. 5	21. 18	·1387					
16. 58	37. 30	21. 30	·1391					
17. 25	33. 20	22. 0	·1386					
17. 38	33. 5	22. 13	·1388					
17. 44	32. 10	22. 27	·1386					
17. 57	33. 10	23. 28	·1388					
18. 8	33. 5	23. 43	·1393					
18. 25	34. 30	23. 59	·1392					
18. 37	33. 55							
19. 21	34. 10							
19. 26	33. 15							
19. 41	32. 50							
19. 44	32. 0							
19. 55	33. 30							
20. 23	33. 50							
20. 38	33. 10							
20. 43	33. 0							
20. 56	33. 15							
21. 10	32. 55							
21. 37	34. 15							
21. 55	34. 5							
22. 9	34. 40							
22. 26	34. 25							
22. 43	36. 5							
23. 33	37. 50							
23. 43	36. 40							
23. 59	37. 40							
Dec. 2		Dec. 2		Dec. 2		Dec. 2		
0. 0	20. 37. 40	0. 0	·1392	0. 0	·03180	1. 0	59·6	60·5
0. 41	36. 30	0. 25	·1397	3. 1	·03211	3. 0	59·6	60·9
1. 6	39. 0	0. 52	·1400	8. 38	·03187	Max.	60·3	60·9
1. 27	38. 0	1. 10	·1399	10. 19	·03171	9. 0	59·1	60·0
1. 40	36. 0	1. 12	·1404	10. 52	·03139	Min.	58·2	58·0
2. 10	35. 50	1. 20	·1398	12. 42	·03146	22. 0	58·4	59·2
2. 21	35. 0		***	23. 59	·03111			
2. 42	35. 50	2. 13	·1400					
3. 17	34. 30	2. 26	·1401					
3. 46	34. 40	3. 14	·1403					
4. 37	34. 0	4. 24	·1400					
5. 18	33. 50	5. 0	·1400					
5. 56	33. 50	6. 12	·1398					
6. 2	33. 30	6. 24	·1390					
6. 15	33. 55	6. 55	·1401					
6. 28	31. 30	7. 0	·1398					
6. 36	31. 20	7. 14	·1400					
6. 52	27. 20	7. 41	·1396					
7. 3	30. 0	7. 53	·1397					
7. 26	33. 20	8. 11	·1392					
7. 44	32. 55	8. 57	·1394					
8. 9	33. 30	9. 26	·1403					
8. 15	32. 30	9. 42	·1402					
8. 27	33. 10	9. 46	·1397					
8. 43	33. 10	10. 3	·1395					
8. 56	33. 40	10. 12	·1403					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 2		Dec. 2						
h m	° ′ ″	h m		h		h m	°	°
9. 12	20. 31. 25	10. 22	·1406					
9. 23	32. 5	10. 41	·1419					
9. 27	31. 40	11. 11	·1404					
9. 59	33. 5	11. 43	·1406					
10. 12	32. 50	12. 24	·1398					
10. 27	34. 10	13. 19	·1397					
10. 39	33. 50	14. 25	·1400					
10. 53	34. 15	14. 34	·1399					
11. 27	30. 20	14. 50	·1403					
11. 39	30. 20	15. 44	·1404					
12. 13	31. 0	15. 56	·1402					
12. 57	34. 0	17. 52	·1407					
13. 21	33. 20	18. 34	·1400					
13. 55	33. 45	18. 50	·1403					
14. 26	33. 55	19. 12	·1398					
14. 39	33. 10	19. 33	·1396					
14. 44	32. 55	20. 4	·1404					
14. 56	33. 20	20. 19	·1402					
15. 9	33. 0	20. 43	·1405					
15. 24	33. 0	23. 24	·1394					
15. 39	33. 45	23. 59	·1400					
15. 45	33. 35							
16. 14	33. 55							
16. 57	33. 25							
17. 43	32. 50							
18. 9	33. 0							
18. 39	34. 30							
18. 57	33. 20							
19. 12	33. 30							
19. 26	34. 5							
19. 42	33. 10							
20. 11	34. 5							
20. 25	33. 20							
20. 53	33. 55							
21. 13	33. 10							
21. 39	34. 0							
22. 11	33. 30							
22. 26	34. 15							
22. 38	33. 55							
22. 42	34. 40							
23. 54	35. 40							
23. 59	36. 20							
Dec. 3		Dec. 3		Dec. 3		Dec. 3		
0. 0	20. 36. 20	0. 0	·1400	0. 0	·03111	Min.	58·8	58·7
0. 13	36. 5	0. 50	·1399	4. 14	·03135	1. 0	59·0	59·9
0. 38	36. 55	0. 59	·1403	10. 16	·03137	9. 0	59·3	60·2
0. 56	35. 50	1. 13	·1400	13. 56	·03170	Max.	60·6	61·7
1. 26	36. 5	1. 44	·1396	21. 8	·03162	21. 0	60·0	61·7
2. 10	35. 20	2. 42	·1398		(†)			
2. 23	35. 0	3. 5	·1394					
2. 38	35. 50	3. 26	·1394					
2. 58	35. 50	3. 42	·1391					
3. 19	34. 30	4. 19	·1399					
3. 42	33. 55	5. 55	·1402					
3. 56	33. 45	6. 13	·1399					
4. 17	35. 0	7. 15	·1401					
4. 39	35. 10	7. 42	·1397					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 3		Dec. 3						
h m	° ′ ″	h m		h m		h m	°	°
5. 23	20. 34. 20	8. 22	·1396					
5. 27	34. 25	9. 19	·1393					
7. 12	33. 5	10. 0	·1394					
7. 40	33. 30	10. 12	·1398					
7. 56	33. 10	10. 24	·1395					
8. 23	33. 10	10. 58	·1397					
8. 58	32. 0	11. 26	·1404					
9. 10	32. 20	11. 44	·1400					
9. 13	31. 55	12. 16	·1400					
9. 45	32. 50	12. 28	·1395					
9. 56	32. 15	12. 59	·1394					
10. 6	33. 5	13. 40	·1398					
10. 19	31. 40	14. 27	·1396					
10. 54	31. 10	15. 26	·1398					
11. 10	31. 45	15. 53	·1402					
11. 27	31. 10	16. 27	·1403					
11. 42	31. 40	16. 40	·1399					
12. 24	31. 30	17. 11	·1404					
12. 47	33. 0	17. 40	·1402					
12. 59	32. 50	17. 43	·1405					
13. 11	34. 0	18. 17	·1403					
13. 32	34. 40	18. 58	·1410					
13. 43	34. 30	20. 4	·1405					
13. 54	34. 5	21. 13	·1402					
13. 58	34. 5		(†)					
14. 24	32. 55							
14. 33	33. 35							
14. 55	33. 35							
15. 11	32. 55							
15. 28	34. 0							
15. 55	33. 40							
15. 58	34. 5							
16. 12	33. 40							
16. 30	35. 0							
16. 42	34. 40							
17. 24	34. 10							
17. 30	32. 55							
17. 40	33. 35							
18. 13	32. 50							
18. 28	33. 15							
18. 47	33. 0							
18. 56	33. 40							
20. 12	32. 50							
20. 41	32. 25							
21. 8	33. 0							
	(†)							
Dec. 4		Dec. 4		Dec. 4		Dec. 4		
	(†)		(†)		(†)	1. 0	57·8	57·8
1. 0	20. 36. 38*	1. 0	·1401*	1. 0	·03093*	3. 0	57·4	57·0
3. 0	36. 15*	3. 0	·1383*	3. 0	·03071*	Min.	57·2	56·6
3. 28	34. 25	3. 27	·1400	3. 27	·03061	9. 0	59·3	60·4
3. 52	34. 25	4. 41	·1399	8. 57	·03132	21. 0	59·6	60·5
4. 11	33. 40	5. 43	·1402	10. 6	·03131	Max.	60·0	60·7
4. 55	34. 30	6. 12	·1398	10. 33	·03112			
5. 6	33. 55	7. 24	·1395	16. 23	·03133			
5. 14	33. 0	7. 41	·1396	21. 3	·03111			
5. 29	33. 40	8. 0	·1391	23. 18	·03091			
5. 39	33. 10	8. 21	·1395	23. 59	·03089			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 4		Dec. 4						
h m	° ′ ″	h m		h m		h m	°	°
5. 59	20. 34. 55	8. 49	·1393					
6. 43	33. 50	8. 59	·1398					
7. 23	33. 40	9. 16	·1394					
7. 26	33. 15	10. 4	·1396					
7. 49	33. 40	10. 15	·1410					
8. 9	30. 55	10. 23	·1410					
8. 23	31. 50	10. 41	·1404					
8. 32	31. 10	11. 0	·1402					
9. 10	32. 10	11. 21	·1396					
9. 14	31. 55	11. 41	·1395					
9. 27	32. 15	12. 8	·1399					
9. 56	32. 25	12. 44	·1398					
10. 9	31. 50	15. 53	·1401					
10. 22	32. 50	19. 4	·1404					
10. 44	29. 10	19. 36	·1406					
10. 59	30. 30	21. 11	·1398					
11. 5	30. 10	21. 13	·1402					
11. 14	31. 10	21. 35	·1396					
11. 23	30. 50	22. 17	·1395					
11. 50	32. 0	23. 42	·1399					
12. 9	33. 15	23. 59	·1398					
12. 25	32. 40							
12. 56	33. 10							
13. 13	33. 10							
13. 37	33. 45							
13. 55	33. 15							
14. 10	33. 55							
14. 17	33. 35							
14. 41	33. 20							
15. 29	33. 50							
15. 53	33. 50							
16. 9	34. 10							
16. 31	33. 45							
20. 18	33. 20							
20. 38	33. 0							
21. 57	34. 45							
22. 25	34. 45							
23. 39	36. 40							
23. 44	37. 10							
23. 59	36. 50							
Dec. 5		Dec. 5		Dec. 5		Dec. 5		
0. 0	20. 36. 50	0. 0	·1398	0. 0	·03089	1. 0	59 ·6	61 ·0
0. 18	37. 20	0. 22	·1399	2. 53	·03136	Min.	59 ·6	61 ·0
0. 31	36. 50	0. 56	·1397	15. 39	·03172	3. 0	59 ·6	61 ·0
1. 25	37. 15	2. 12	·1399	21. 31	·03169	9. 0	60 ·1	61 ·4
2. 26	34. 50	2. 44	·1402	23. 59	·03182	21. 0	60 ·6	62 ·0
2. 59	36. 30	3. 56	·1398			22. 0	60 ·6	62 ·0
3. 42	35. 30	5. 28	·1400			23. 0	60 ·6	62 ·0
4. 33	34. 50	5. 45	·1397			Max.	61 ·0	62 ·2
4. 57	35. 20	6. 26	·1398					
5. 26	34. 55	6. 41	·1395					
5. 48	35. 40	7. 18	·1399					
6. 9	34. 50	7. 49	·1398					
6. 26	35. 10	8. 24	·1402					
6. 46	33. 30	8. 57	·1399					
6. 57	32. 40	9. 12	·1401					
7. 30	33. 25	9. 24	·1399					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 5		Dec. 5						
h m	° ′ ″	h m		h m		h m	°	°
7. 57	20. 33. 5	9. 42	·1400					
8. 38	33. 30	10. 53	·1397					
9. 22	32. 55	11. 12	·1398					
9. 38	32. 55	11. 26	·1408					
10. 11	32. 25	11. 47	·1399					
11. 9	32. 25	12. 42	·1400					
11. 23	30. 15	13. 40	·1397					
11. 53	32. 5	13. 56	·1402					
11. 58	31. 40	14. 20	·1400					
12. 29	31. 40	14. 47	·1404					
12. 44	32. 5	14. 56	·1402					
13. 5	32. 15	15. 11	·1406					
13. 29	34. 30	15. 38	·1402					
14. 14	32. 50	16. 19	·1401					
14. 27	33. 50	17. 43	·1404					
14. 42	33. 50	18. 40	·1403					
15. 0	32. 15	21. 23	·1399					
15. 11	32. 15	23. 18	·1398					
15. 27	31. 30	23. 59	·1400					
16. 18	32. 40							
16. 41	33. 25							
17. 26	33. 25							
17. 38	33. 50							
17. 41	33. 30							
18. 21	33. 15							
18. 27	32. 55							
18. 58	33. 30							
20. 14	33. 30							
20. 55	33. 45							
21. 9	33. 35							
22. 39	34. 50							
23. 59	36. 40							
Dec. 6		Dec. 6		Dec. 6		Dec. 6		
0. 0	20. 36. 40	0. 0	·1400	0. 0	·03182	0. 0	61 ·0	62 ·4
1. 45	35. 30	0. 15	·1404	9. 12	·03253	1. 0	61 ·1	62 ·5
2. 49	34. 25	1. 11	·1406	14. 26	·03196	2. 0	61 ·1	62 ·5
2. 59	34. 25	3. 5	·1403	23. 59	·03175	3. 0	..	62 ·7
3. 57	33. 55	3. 24	·1407			Max.	61 ·5	63 ·3
5. 43	34. 30	3. 41	·1406			9. 0	61 ·5	63 ·0
6. 54	34. 5	4. 23	·1403			21. 0	59 ·4	60 ·6
7. 21	34. 25	6. 0	·1404			22. 0	58 ·8	60 ·2
7. 43	32. 55	6. 53	·1405			Min.	58 ·8	60 ·2
7. 53	32. 55	7. 32	·1401			23. 0	59 ·4	60 ·2
8. 0	32. 15	7. 52	·1398					
8. 23	33. 50	8. 51	·1396					
8. 59	32. 0	9. 30	·1399					
9. 12	32. 50	9. 48	·1398					
9. 23	32. 50	10. 14	·1403					
9. 36	33. 10	10. 29	·1400					
9. 54	32. 25	12. 4	·1403					
10. 6	32. 35	12. 19	·1402					
10. 10	32. 5	14. 54	·1404					
10. 17	32. 50	16. 4	·1408					
10. 39	32. 0	17. 40	·1411					
13. 28	31. 50	17. 45	·1409					
16. 7	33. 30	17. 54	·1411					
17. 36	32. 55	20. 17	·1410					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 6		Dec. 6						
h m	° ′ ″	h m				h m		°
17. 42	20. 33. 10	21. 25	·1404					
17. 56	32. 30	22. 26	·1402					
18. 42	33. 5	23. 10	·1404					
21. 9	33. 10	23. 29	·1402					
23. 59	36. 5	23. 59	·1404					
Dec. 7		Dec. 7		Dec. 7		Dec. 7		
0. 0	20. 36. 5	0. 0	·1404	0. 0	·03175	0. 0	60·0	61·6
0. 42	36. 15	0. 49	·1406	1. 43	·03148	1. 0	59·6	61·0
1. 22	37. 10	1. 11	·1405	3. 16	·03139	2. 0	59·6	61·0
1. 30	36. 20	1. 21	·1408	10. 41	·03151	3. 0	59·6	61·0
2. 14	35. 50	2. 11	·1405	12. 53	·03139	Max.	60·6	62·6
2. 29	35. 55	2. 56	·1403	13. 40	·03128	9. 0	60·0	62·2
3. 6	35. 0	5. 24	·1404	14. 28	·03130	Min.	58·8	59·0
3. 23	35. 0	6. 6	·1406	21. 46	·03107	21. 0	59·0	59·0
4. 56	34. 30	6. 12	·1403	23. 59	·03142			
6. 27	34. 20	7. 26	·1400					
8. 22	33. 30	7. 55	·1399					
8. 40	32. 50	8. 11	·1401					
9. 4	33. 10	8. 25	·1399					
9. 28	32. 20	9. 10	·1400					
10. 8	32. 55	9. 43:	·1394					
10. 41	30. 55	10. 19	·1398					
10. 57	31. 50	10. 33	·1394					
11. 26	30. 30	10. 42	·1393					
12. 26	32. 50	11. 8	·1397					
12. 45	32. 50	11. 41	·1394					
13. 6	36. 5	11. 53	·1396					
13. 38	32. 50	12. 12	·1393					
13. 58	31. 35	12. 48	·1398					
14. 27	32. 15	13. 40	·1405					
14. 52	33. 50	14. 12	·1400					
14. 56	33. 15	14. 24	·1398					
15. 28	32. 50	14. 42	·1402					
15. 55	32. 0	15. 0	·1399					
16. 12	31. 40	15. 38	·1402					
16. 41	32. 55	16. 14	·1405					
16. 56	32. 45	17. 24	·1406					
17. 14	33. 20	18. 57	·1404					
17. 26	33. 5	19. 28	·1403					
18. 8	33. 35	20. 19	·1395					
18. 27	33. 20	20. 43	·1396					
18. 56	33. 50	21. 43	·1392					
19. 56	33. 30	22. 18	·1390					
20. 24	34. 15	22. 42	·1387					
20. 40	34. 30	23. 26	·1387					
20. 58	33. 50	23. 59	·1390					
21. 41	34. 20							
22. 55	34. 40							
23. 59	35. 45							
Dec. 8		Dec. 8		Dec. 8		Dec. 8		
0. 0	20. 35. 45	0. 0	·1390	0. 0	·03142	1. 0	60·6	61·0
0. 34	36. 0	0. 24	·1398	1. 56	·03181	3. 0	59·8	60·0
0. 41	36. 20	1. 11	·1400	6. 24	·03152	Min.	59·0	59·0
2. 9	35. 30	1. 34	·1412	8. 46	·03152	9. 0	59·4	59·0
2. 26	36. 15	1. 42	·1405	10. 23	·03137	Max.	61·0	63·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 8		Dec. 8		Dec. 8		Dec. 8		
h m	° ′ ″	h m		h m		h m	°	°
3. 30	20. 35. 20	1. 49	·1403	11. 42	·03148	21. 0	60·8	63·0
4. 56	36. 0	2. 55	·1399	12. 4	·03139			
5. 12	35. 15	3. 42	·1394	12. 55	·03154			
5. 42	35. 50	4. 10	·1392	14. 1	·03150			
6. 9	34. 20	4. 41	·1398	18. 55	·03172			
6. 23	34. 55	5. 22	·1397	23. 59	·03162			
6. 28	34. 5	5. 40	·1396					
6. 53	33. 40	6. 10	·1402					
6. 57	33. 15	6. 18	·1399					
7. 9	34. 0	6. 26	·1401					
7. 26	33. 40	6. 45	·1397					
7. 53	30. 50	6. 57	·1403					
8. 1	30. 25	7. 13	·1395					
	***	7. 35	·1394					
8. 39	32. 15	7. 56	·1392					
8. 56	31. 45	8. 10	·1389					
9. 26	32. 25	8. 26	·1381					
10. 0	31. 0	8. 40	·1384					
10. 13	31. 10	8. 53	·1382					
10. 28	30. 0	9. 26	·1391					
10. 42	29. 40	9. 57	·1394					
10. 56	30. 5	10. 11	·1392					
11. 6	29. 50	10. 24	·1397					
11. 14	30. 15	10. 40	·1392					
11. 37	28. 50	11. 10:	·1390					
11. 43	28. 50	11. 55	·1406					
11. 53	27. 40	12. 26	·1390					
12. 0	27. 25	12. 44	·1393					
12. 44	32. 30	12. 55	·1392					
13. 6	34. 50	13. 19	·1398					
13. 33	33. 30	13. 43	·1400					
13. 41	33. 45	14. 24	·1396					
13. 59	32. 0	14. 41	·1397					
14. 12	32. 0	14. 52	·1395					
15. 12	33. 30	16. 43	·1400					
15. 49	33. 30	17. 25	·1405					
16. 27	34. 20	18. 25	·1401					
16. 46	34. 10	18. 34	·1405					
17. 26	35. 15	18. 42	·1403					
17. 45	33. 30	18. 59	·1406					
18. 58	35. 20		***					
19. 14	34. 50	20. 8	·1405					
19. 26	35. 30	20. 13	·1407					
19. 42	35. 20	20. 39	·1402					
19. 53	36. 10	20. 55	·1403					
20. 9	35. 20	21. 22	·1397					
20. 25	35. 50	21. 30	·1400					
20. 41	34. 15	21. 44	·1396					
21. 10	34. 10	22. 7	·1398					
21. 38	36. 5	22. 24	·1396					
21. 47	34. 30	22. 40	·1397					
22. 10	33. 20	22. 47	·1395					
22. 16	34. 10	23. 12	·1396					
22. 26	33. 20	23. 59	·1395					
23. 8	33. 40							
23. 59	36. 50							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 9		Dec. 9		Dec. 9		Dec. 9		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 36. 50	0. 0	·1395	0. 0	·03162	1. 0	60·6	62·6
0. 11	36. 50	0. 14	·1397	4. 8	·03191	3. 0	61·1	61·0
0. 23	38. 15	0. 41	·1396	6. 16	·03197	Max.	61·5	62·7
0. 27	37. 30	1. 15	·1400	6. 37	·03209	9. 0	60·2	60·5
0. 52	37. 40	1. 40	·1389	7. 26	·03196	Min.	59·0	60·5
1. 11	39. 5	1. 54	·1391	7. 57	·03202	22. 0	59·6	61·0
1. 42	36. 5	2. 18	·1384	8. 9	·03188			
2. 12	40. 40	3. 10	·1396	8. 23	·03193			
2. 30	37. 50	3. 44	·1399	9. 6	·03176			
3. 22	35. 50	4. 4	·1397	9. 36	·03162			
3. 39	35. 40	4. 22	·1400	10. 46	·03171			
3. 51	34. 55	4. 56	·1396	15. 24	·03153			
4. 0	35. 50	5. 12	·1397	17. 9	·03156			
4. 26	34. 30	5. 26	·1391	23. 59	·03121			
4. 42	35. 40	5. 42	·1394					
5. 17	35. 20	5. 59	·1392					
5. 31	34. 0	6. 19	·1384					
5. 53	34. 20	6. 40	·1388					
6. 8	33. 50		***					
6. 26	29. 50	6. 57	·1392					
6. 41	32. 20	7. 8	·1390					
6. 59	33. 30	7. 12	·1392					
7. 23	33. 50	7. 26	·1387					
7. 40	31. 0	7. 41	·1392					
8. 4	33. 10	8. 0	·1389					
8. 15	19. 15	8. 18	·1420					
8. 39	22. 10	8. 25	·1426					
8. 46	21. 55	8. 47	·1409					
8. 56	22. 30	8. 59	·1412					
9. 8	22. 30	9. 10	·1417					
9. 13	25. 15	9. 39	·1391					
9. 31	25. 55	9. 51	·1382					
9. 42	27. 40	10. 12	·1388					
9. 56	26. 10	10. 19	·1392					
10. 14	27. 0	10. 30	·1387					
10. 42	31. 10	11. 12	·1392					
11. 12	32. 50	11. 58	·1394					
11. 39	32. 50	12. 54	·1393					
12. 24	33. 50	14. 25	·1395					
13. 29	33. 30	14. 41	·1399					
13. 43	34. 5	14. 56	·1397					
13. 59	33. 20	16. 40	·1396					
14. 14	35. 20	17. 3	·1398					
14. 42	37. 5	17. 14	·1396					
	***	17. 41	·1402					
15. 56	33. 25	18. 24	·1399					
	***	18. 50	·1400					
16. 41	33. 0	19. 3	·1402					
16. 58	33. 30	19. 25	·1399					
17. 9	34. 40	20. 0	·1397					
17. 16	33. 15	20. 20	·1399					
17. 42	32. 40	20. 43	·1392					
18. 11	33. 50	21. 6	·1390					
18. 28	33. 25	21. 20	·1391					
18. 42	34. 15	21. 42	·1387					
18. 54	33. 20	21. 54	·1390					
20. 1	33. 20	22. 11	·1389					
20. 52	34. 25	22. 58	·1395					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 9		Dec. 9						
h m	° ′ ″	h m						
21. 14	20. 34. 15	23. 25	·1394					
21. 39	35. 20	23. 59	·1396					
22. 10	34. 40							
22. 44	35. 40							
22. 58	36. 25							
23. 46	36. 15							
23. 59	36. 50							
Dec. 10		Dec. 10		Dec. 10		Dec. 10		
0. 0	20. 36. 50	0. 0	·1396	0. 0	·03121	1. 0	59·8	61·0
0. 45	37. 45	0. 40	·1399	3. 12	·03143	Max.	61·1	62·2
1. 3	37. 20	1. 20	·1397	6. 25	·03142	9. 0	59·8	61·3
1. 42	38. 0	1. 40	·1399	6. 57	·03153	Min.	58·9	59·0
1. 54	37. 40	2. 45	·1387	13. 9	·03144	21. 0	60·0	60·0
2. 13	37. 30	3. 0	·1389	13. 34	·03133			
2. 58	35. 45	3. 13	·1387	15. 4	·03134			
3. 11	36. 10	3. 42	·1386	18. 44	·03143			
3. 26	35. 30	4. 19	·1392	23. 59	·03126			
	***	4. 55	·1397					
4. 43	35. 55	5. 11	·1395					
4. 56	34. 40	5. 25	·1399					
5. 11	35. 0	6. 43	·1385					
5. 17	34. 30	7. 14	·1392					
5. 46	34. 50	7. 42	·1388					
6. 11	34. 30	7. 52	·1391					
6. 55	26. 20	8. 18:	·1386					
6. 59	26. 20	8. 44	·1392					
7. 39	32. 10	9. 8	·1389					
7. 48	32. 0	9. 56	·1394					
8. 4	33. 35	11. 20	·1398					
8. 14	32. 50	12. 24	·1396					
8. 41	30. 5	12. 44	·1398					
9. 9	30. 50	12. 58	·1396					
9. 17	31. 55	13. 16	·1399					
10. 38	33. 15	13. 28	·1404					
11. 42	33. 20	14. 12	·1393					
11. 57	33. 40	15. 3	·1396					
13. 14	32. 30	16. 0	·1396					
13. 26	33. 15	16. 19	·1398					
13. 36	33. 15	17. 14	·1397					
13. 44	31. 0	17. 58	·1400					
14. 56	34. 0	19. 0	·1403					
15. 30	32. 40	19. 25	·1399					
16. 21	32. 50	19. 54	·1402					
17. 10	33. 50		***					
17. 25	33. 20	22. 20	·1396					
17. 38	33. 50	22. 57	·1384					
17. 54	32. 55	23. 24	·1391					
18. 14	33. 55	23. 59	·1392					
18. 27	33. 15							
18. 43	33. 15							
18. 58	33. 10							
19. 57	33. 25							
20. 11	33. 5							
20. 30	33. 0							
21. 20	34. 25							
21. 43	34. 35							
22. 28	35. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 10								
h m	° ′ ″	h m		h m		h m		°
23. 0	20. 35. 30							
23. 28	36. 50							
23. 59	36. 5							
Dec. 11		Dec. 11		Dec. 11		Dec. 11		
0. 0	20. 36. 5	0. 0	·1392	0. 0	·03126	1. 0	60·5	61·0
0. 53	35. 55	0. 10	·1396	3. 3	·03146	3. 0	60·5	61·0
1. 23	37. 30	1. 8	·1399	4. 31	·03148	Max.	60·9	61·9
1. 43	36. 40	2. 20	·1394	8. 30	·03161	9. 0	60·3	61·4
2. 9	37. 0	3. 56	·1399	10. 26	·03160	Min.	59·5	60·4
2. 24	36. 0	5. 40	·1397	10. 55	·03148	21. 0	60·1	61·0
2. 57	34. 50	5. 50	·1393	11. 26	·03156			
4. 27	34. 40	7. 10	·1392	15. 34	·03137			
4. 39	35. 5	7. 30	·1396	17. 11	·03126			
4. 54	34. 5	7. 43	·1393	18. 26	·03137			
4. 58	34. 30	8. 56	·1397	21. 59	·03118			
5. 9	34. 5	9. 24	·1393	22. 57	·03122			
5. 31	34. 40	9. 29	·1395	23. 59	·03122			
6. 9	33. 45	9. 50	·1392					
6. 56	34. 30	10. 25	·1391					
7. 6	34. 10	10. 45	·1409					
7. 37	34. 30	11. 19	·1391					
7. 49	34. 0	11. 41	·1398					
8. 23	33. 20	11. 54	·1394					
9. 11	33. 20	11. 59	·1396					
9. 56	30. 50	12. 11	·1394					
10. 13	31. 25	12. 40	·1397					
10. 27	26. 55	14. 41	·1399					
10. 43	26. 55	15. 4	·1396					
10. 57	29. 50	15. 38	·1395					
11. 9	28. 50	16. 11	·1401					
11. 26	31. 25	16. 46	·1406					
11. 29	31. 10	17. 15	·1404					
11. 40	32. 5	17. 52	·1401					
11. 48	31. 35	18. 10	·1403					
14. 11	33. 55	19. 41	·1405					
14. 27	33. 20	20. 28	·1400					
14. 40	33. 30	21. 22	·1396					
14. 53	32. 55	22. 24	·1399					
15. 11	34. 40	22. 59	·1400					
15. 25	33. 50	23. 49	·1399					
15. 40	36. 15	23. 59	·1400					
15. 59	35. 0							
16. 13	34. 5							
16. 38	33. 20							
16. 54	32. 40							
17. 28	32. 15							
18. 8	33. 10							
18. 39	32. 50							
19. 41	33. 30							
20. 14	33. 15							
20. 57	34. 20							
21. 28	34. 20							
22. 3	35. 50							
22. 13	35. 25							
22. 24	35. 50							
22. 53	35. 40							
23. 24	36. 50							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 11								
h m	° ′ ″	h m		h m		h m	°	°
23. 43	20. 35. 20							
23. 56	35. 35							
23. 59	35. 10							
Dec. 12		Dec. 12		Dec. 12		Dec. 12		
0. 0	20. 35. 10	0. 0	·1400	0. 0	·03122	1. 0	60·1	61·0
1. 23	35. 15	1. 11	·1403	3. 23	·03137	3. 0	60·1	61·0
3. 25	33. 50	2. 25	·1399	8. 58	·03146	Max.	60·6	61·6
7. 14	34. 0	6. 45	·1401	14. 44	·03135	9. 0	59·8	60·3
10. 56	33. 15	12. 20	·1398	23. 59	·03084	21. 0	59·9	60·4
11. 36	32. 30	13. 13	·1396			22. 0	59·6	60·0
12. 29	33. 20	13. 28	·1398			Min.	59·6	60·0
14. 46	34. 5	13. 52	·1397			23. 0	59·6	60·2
15. 10	34. 50	14. 11	·1399					
15. 23	34. 10	14. 23	·1398					
15. 56	34. 10							
16. 8	34. 0	16. 4	·1404					
16. 14	33. 10	16. 20	·1403					
16. 56	33. 10	16. 40	·1405					
17. 27	34. 15	17. 5	·1402					
17. 50	34. 5	17. 27	·1405					
18. 36	32. 50	17. 49	·1403					
18. 42	33. 10	18. 13	·1406					
19. 53	33. 40	19. 23	·1412					
20. 9	34. 10	19. 56	·1410					
20. 38	35. 35	20. 10	·1408					
20. 40	34. 15	20. 23	·1407					
20. 53	35. 20	20. 34	·1411					
21. 11	34. 45	20. 39	·1406					
23. 12	36. 40	20. 54	·1412					
23. 26	37. 20	21. 18	·1410					
23. 59	37. 25	23. 12	·1404					
		23. 18	·1406					
		23. 28	·1404					
		23. 59	·1403					
Dec. 13		Dec. 13		Dec. 13		Dec. 13		
0. 0	20. 37. 25	0. 0	·1403	0. 0	·03084	0. 0	59·8	60·3
0. 39	36. 40	0. 11	·1402	1. 55	·03116	1. 0	59·8	60·3
1. 1	38. 15	0. 38	·1400	4. 54	·03124	2. 0	59·8	60·3
1. 14	38. 0	0. 58	·1411	7. 26	·03176	3. 0	60·0	60·5
1. 31	38. 30	1. 12	·1415	8. 41	·03184	9. 0	60·6	61·2
2. 12	38. 5	1. 22	·1407	8. 59	·03167	Max.	61·0	61·7
2. 24	36. 55	1. 43	·1411	14. 14	·03135	21. 0	59·8	60·7
2. 41	38. 20	1. 57	·1409	23. 59	·03088	22. 0	59·8	60·4
2. 54	38. 40	2. 10	·1413			23. 0	59·6	60·2
3. 12	37. 5	2. 28	·1410			Min.	59·5	60·2
3. 42	36. 15	2. 55	·1406					
4. 2	36. 30	3. 5	·1410					
4. 9	35. 50	3. 12	·1406					
4. 46	35. 10	3. 41	·1410					
4. 56	34. 30	3. 56	·1408					
5. 24	37. 30	4. 41	·1411					
5. 28	40. 15	4. 56	·1409					
5. 39	39. 0	5. 20	·1400					
5. 43	39. 20	5. 34	·1390					
6. 24	36. 30	5. 45	·1384					
6. 44	35. 45	6. 12	·1387					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Dec. 13		Dec. 13							Dec. 14		Dec. 14		Dec. 14		Dec. 14		
h m	° ′ ″	h m		h m		h m	°	°	h m	′	h m		h m		h		
6. 56	20. 35. 0	6. 39	·1392						0. 0	20. 35. 10	0. 0	·1405	0. 0	·03088	0. 0	59·6	60·2
7. 23	36. 10	6. 43	·1389						0. 26	36. 10	1. 7	·1404	9. 1	·03122	1. 0	59·8	60·6
7. 51	35. 5	6. 49	·1393						0. 39	36. 20	1. 26	·1400	9. 25	·03109	3. 0	59·7	60·4
8. 12	31. 30	7. 11	·1389						0. 50	37. 50	1. 42	·1402	13. 27	·03105	Max.	60·5	61·7
8. 27	18. 30	7. 44	·1391						2. 26	35. 30	2. 53	·1400	16. 28	·03096	9. 0	59·1	60·5
8. 56	29. 0	7. 55	·1388						3. 40	33. 35	3. 11	·1396	17. 32	·03081	Min.	58·5	59·2
9. 26	33. 20	8. 6	·1393						4. 22	33. 35	3. 30	·1400	22. 17	·03050	21. 0	58·8	59·5
10. 10	32. 40	8. 12	·1390						4. 45	34. 0	3. 42	·1399	23. 59	·03049			
10. 27	33. 0	8. 22	·1398						5. 8	33. 30	4. 28	·1405					
10. 58	32. 30	8. 42	·1425						5. 25	33. 35	4. 58	·1402					
11. 24	32. 20	8. 55	·1407						5. 44	34. 5	5. 26	·1404					
11. 42	33. 10	9. 13	·1395						6. 13	33. 0	5. 40	·1401					
11. 53	33 10	9. 55	·1399						6. 27	33. 50	5. 49	·1399					
11. 56	32. 10	10. 11	·1397						6. 42	33. 10	6. 35	·1396					
12. 26	33. 40	10. 51	·1400						7. 3	30. 15	6. 44	·1399					
12. 39	32. 20	11. 22	·1398						7. 23	32. 55	7. 6	·1394					
12. 58	33. 50	11. 43	·1403						7. 39	30. 15	7. 43	·1399					
13. 58	33. 50	11. 47	·1401						7. 53	30. 40	7. 54	·1396					
14. 17	32. 30	11. 54	·1402						8. 7	26. 30	8. 23	·1404					
14. 55	33. 50	12. 4	·1396						8. 11	25. 55	8. 50	·1399					
15. 1	32. 55	12. 29	·1397						8. 39	32. 25	9. 10	·1403					
15. 16	32. 5	13. 43	·1400						8. 58	33. 30	9. 22	·1396					
15. 39	31. 50	13. 55	·1398						9. 12	32. 25	9. 51	·1403					
15. 51	33. 0	14. 19	·1396						9. 28	26. 55	10. 16	·1398					
15. 57	32. 20	14. 43	·1398						9. 39	27. 15	10. 35	·1394					
16. 23	34. 10	14. 54	·1400						9. 58	30. 0	11. 41	·1398					
16. 27	33. 40	15. 27	·1395						10. 16	29. 50	13. 11	·1400					
17. 11	34. 25		***						10. 26	30. 15	13. 52	·1397					
17. 56	33. 30	16. 25	·1396						10. 52	30. 30	14. 12	·1399					
18. 6	31. 50	16. 41	·1401						11. 14	31. 40	14. 31	·1398					
18. 19	33. 20	16. 44	·1400						11. 41	32. 5	16. 43	·1398					
18. 28	32. 25	17. 12	·1408						11. 56	32. 50	17. 18	·1405					
18. 43	32. 10	17. 24	·1409						12. 12	32. 5	20. 27	·1406					
19. 7	33. 5	17. 37	·1406						12. 28	33. 0	20. 49	·1409					
19. 11	32. 25	17. 42	·1408						12. 53	34. 0	21. 5	·1405					
19. 40	33. 15	17. 57	·1404						13. 14	32. 55	21. 12	·1409					
20. 8	32. 20	18. 14	·1409						13. 26	33. 5	21. 19	·1402					
20. 23	32. 35	18. 23	·1405						13. 42	32. 10	21. 41	·1404					
20. 29	32. 5	18. 46	·1407						14. 8	33. 50	21. 45	·1401					
20. 53	32. 30	19. 36	·1401						14. 19	33. 5	21. 57	·1404					
21. 0	34. 0	19. 43	·1399						14. 38	33. 0	22. 55	·1401					
21. 51	33. 56	19. 55	·1400						14. 53	33. 40	23. 11	·1404					
22. 41	33. 10	20. 11	·1399						15. 11	33. 10	23. 54	·1402					
22. 45	33. 30	20. 36	·1405						15. 40	32. 50	23. 59	·1403					
23. 38	34. 0	20. 41	·1402						16. 14	32. 50							
23. 59	35. 10	20. 43	·1404						16. 42	35. 55							
		20. 52	·1400						17. 23	31. 35							
		20. 55	·1403						17. 56	31. 35							
		21. 29	·1392						18. 57	32. 55							
		22. 26	·1403						19. 27	32. 10							
		22. 40	·1400						19. 43	32. 50							
		22. 49	·1406						20. 11	32. 25							
		23. 12	·1404						20. 27	32. 25							
		23. 19	·1407						20. 53	33. 35							
		23. 49	·1403						20. 55	33. 40							
		23. 59	·1405						20. 59	33. 5							
									21. 23	32. 55							
									21. 41	33. 45							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 14								
h m	° ′ ″	h m		h m		h m	°	°
21.50	20.33. 0							
22.26	33.45							
22.39	33.15							
22.48	34. 0							
22.58	33.50							
23.17	35.10							
23.26	34.50							
23.59	35.35							
Dec. 15		Dec. 15		Dec. 15		Dec. 15		
0. 0	20.35.35	0. 0	·1403	0. 0	·03049	1. 0	59·6	60·5
0.27	36.30	0.27	·1406	2.15	·03082	3. 0	59·1	60·0
0.43	35.45	0.42	·1403	4.33	·03079	Max.	60·2	61·3
1.10	36.30	1.11	·1408	9.54	·03098	9. 0	59·9	61·0
1.53	34.20	1.20	·1403	14. 9	·03081	Min.	58·2	59·0
2.10	34.50	1.29	·1400	23.59	·03008	21. 0	58·8	59·6
2.38	34. 0	1.59	·1407					
2.49	34.20	2.13	·1404					
3.26	33.30	2.43	·1407					
3.39	33.55	3.10	·1404					
3.44	33.35	3.55	·1406					
4. 8	34.10	4.23	·1402					
4.12	34. 5	4.35	·1403					
4.24	34.30	4.51	·1402					
4.32	33.40	5.11	·1405					
4.56	33.55	5.42	·1403					
5. 9	33. 0	6. 1	·1398					
5.31	34.20	6.18	·1400					
6. 2	33.30	6.41	·1398					
6.26	33.40	7.13	·1401					
6.43	33.20	7.41	·1400					
7.13	33.55	7.51	·1402					
7.39	33.50	8.12	·1397					
7.53	33. 0	8.39	·1399					
8.10	33.15	8.57	·1396					
8.26	32.55	9.43	·1400					
8.39	32.55	9.55	·1398					
8.56	31.45	10.11	·1403					
9.15	31.30	10.24	·1408					
9.29	32.20	10.57	·1398					
9.42	32.30	11.16	·1404					
9.56	31.30	11.26	·1402					
10.11	31.50	11.34	·1404					
10.23	33. 5	12.18	·1398					
10.28	33. 5	12.59	·1397					
10.39	32.20	13.12	·1401					
10.43	32.10	13.22	·1399					
10.56	31.30	13.41	·1403					
11. 8	32.55	14. 8	·1399					
11.43	31.20	15.35	·1401					
12. 8	31.20	18.29	·1404					
12.22	32.20	18.43	·1405					
12.26	32.10	19.26	·1403					
12.41	33. 0	19.39	·1404					
12.45	32.50	20.30	·1402					
12.54	33.15	20.51	·1406					
13.26	32.10	21. 0	·1403					
13.34	32.40	21.10	·1408					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 15		Dec. 15						
h m	° ′ ″	h m		h m		h m	°	°
13.42	20.31.55	21.21	·1405					
14. 9	31.25	22.56	·1403					
14.49	33. 5	23.13	·1404					
14.57	32.50	23.32	·1405					
15. 5	33.10	23.59	·1406					
16. 9	32.50							
16.25	33.15							
16.44	32.40							
17.25	32.30							
17.39	33.15							
19. 6	32.50							
19.24	33. 5							
	***							
20.39	31.55							
21. 6	32. 5							
21.10	32.50							
21.29	32.20							
23.22	34.10							
23.28	35.10							
23.41	35.10							
23.59	35.50							
Dec. 16		Dec. 16		Dec. 16		Dec. 16		
0. 0	20.35.50	0. 0	·1406	0. 0	·03008	Min.	58·5	58·6
0.17	35.30	0.14	·1407	8.56	·03041	1. 0	58·5	58·6
1.14	35.40	1.11	·1408	12.43	·03041	3. 0	58·6	58·9
3.56	33.50	3. 8	·1407	23.59	·03046	9. 0	59·1	59·7
8.25	32.55	9. 0	·1402			Max.	60·0	60·8
8.38	32. 0	9.43	·1404			21.30	59·6	59·4
8.59	32.55	10. 2	·1402					
9.37	32.40	10.41	·1402					
9.43	32. 5	10.55	·1407					
10.26	32.55	11.39	·1402					
10.35	32.20	12.11	·1404					
11.39	33. 0	12.32	·1402					
11.48	33.30	13. 4	·1404					
12. 9	32.50	13.55	·1403					
13. 8	33.15	18. 0	·1407					
13.22	33. 0	18.12	·1406					
14.44	33.55	18.22	·1408					
16.51	33.30	21.53	·1403					
20.43	32.40	22. 3	·1406					
23.26	34.15	22.23	·1404					
23.55	35. 0	22.41	·1406					
23.59	34.50	23.59	·1407					
Dec. 17		Dec. 17		Dec. 17		Dec. 17		
0. 0	20.34.50	0. 0	·1407	0. 0	·03046	0. 0	59·3	59·4
1. 7	35.20	1.14	·1405	1.12	·03046	Max.	59·9	60·6
1.24	35.20	4.41	·1406	11.41	·03041	9. 0	59·1	60·2
1.51	35.55	5.30	·1405	23.59	·02972	Min.	57·7	59·0
2.53	34.30	6. 8	·1406			21. 0	58·2	59·2
4.50	34.30	8.24	·1403					
5.29	34.50	8.41	·1405					
5.40	34.30	9. 8	·1402					
6.13	34.30	9.12	·1406					
7.11	33.30	9.25	·1402					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec.17		Dec.17						
h m	° ′ ″	h m		h m		h m	°	°
7. 32	20. 33. 10	10. 6	·1400					
8. 11	33. 10	10. 24	·1404					
8. 23	32. 55	10. 46	·1401					
11. 13	32. 50	11. 11	·1403					
11. 53	32. 30	11. 28	·1402					
13. 28	33. 45	12. 11	·1404					
14. 15	33. 30	12. 49	·1402					
14. 57	34. 20	13. 19	·1404					
15. 26	33. 55	13. 43	·1403					
15. 29	34. 40	13. 56	·1404					
15. 41	33. 30	14. 13	·1403					
16. 29	33. 50	15. 25	·1405					
16. 53	33. 20	15. 33	·1409					
17. 11	33. 40	15. 42	·1406					
18. 37	32. 45	17. 4	·1411					
18. 43	33. 5	18. 24	·1413					
19. 20	32. 30	20. 55	·1411					
20. 30	32. 35	21. 36	·1408					
22. 23	33. 55	23. 21	·1410					
23. 43	34. 10	23. 59	·1413					
23. 59	34. 30							
Dec.18		Dec. 18		Dec.18		Dec.18		
0. 0	20. 34. 30	0. 0	·1413	0. 0	·02972	1. 0	58 ·2	59 ·0
1. 9	36. 50	0. 50	·1416	1. 12	·02970	3. 0	58 ·2	59 ·1
1. 44	35. 55	1. 50	·1409	7. 14	·03003	Max.	59 ·7	60 ·7
2. 8	36. 40	2. 3	·1411	14. 31	·02991	9. 0	58 ·7	59 ·5
2. 12	36. 40	2. 15	·1407	23. 59	·02957	Min.	57 ·4	58 ·3
2. 28	37. 20	2. 26	·1409			21. 0	58 ·0	59 ·0
2. 42	36. 55	2. 40	·1405					
3. 43	37. 30	3. 26	·1407					
4. 39	39. 30	4. 13	·1399					
4. 58	39. 0	4. 27	·1400					
5. 16	36. 45	5. 13	·1398					
5. 56	35. 20	5. 43	·1403					
6. 25	35. 45	6. 26	·1398					
6. 39	35. 15	6. 44	·1400					
6. 44	35. 30	6. 57	·1398					
6. 59	33. 50	7. 35	·1404					
7. 27	33. 30	7. 58	·1405					
7. 40	33. 55	9. 24	·1403					
7. 58	33. 50	10. 23	·1400					
8. 10	33. 10	10. 42	·1401					
8. 24	33. 10	11. 53	·1399					
9. 26	32. 10	12. 12	·1406					
10. 39	32. 25	12. 50	·1400					
11. 2	31. 55	13. 13	·1399					
11. 11	32. 5	15. 42	·1403					
11. 26	31. 30	15. 55	·1402					
11. 42	32. 15	16. 24	·1405					
11. 56	30. 25	16. 35	·1403					
12. 8	31. 40	17. 18	·1405					
12. 37	31. 20	19. 35	·1404					
12. 42	32. 0	22. 26	·1402					
12. 56	31. 20	23. 13	·1404					
13. 12	31. 40	23. 59	·1407					
13. 23	31. 25							
14. 53	32. 55							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec.18								
h m	° ′ ″	h m		h m		h m		°
15. 26	20. 32. 40							
15. 39	33. 15							
15. 55	33. 5							
16. 25	34. 0							
16. 36	33. 40							
16. 43	34. 0							
18. 16	33. 30							
20. 25	32. 30							
22. 11	33. 30							
22. 42	34. 10							
22. 54	33. 50							
23. 55	36. 0							
23. 59	35. 25							
Dec.19		Dec. 19		Dec. 19		Dec.19		
0. 0	20. 35. 25	0. 0	·1407	0. 0	·02957	1. 0	58 ·6	59 ·4
0. 12	35. 25	1. 45	·1411	2. 53	·02991	3. 0	58 ·4	59 ·4
0. 53	36. 20	3. 29	·1410	8. 40	·03005	Max.	59 ·0	60 ·2
1. 42	35. 55	4. 28	·1406	10. 55	·03004	9. 0	58 ·7	59 ·8
1. 52	36. 20	4. 50	·1408	11. 44	·02991	Min.	57 ·0	57 ·8
2. 28	35. 40	5. 51	·1407	15. 14	·02976	21. 0	57 ·8	58 ·0
3. 11	35. 20	6. 19	·1406	22. 14	·02937	22. 0	57 ·8	60 ·0
4. 27	36. 15	6. 41	·1409	23. 59	·02941	23. 0	57 ·6	58 ·0
4. 41	35. 30	6. 52	·1406					
4. 59	36. 5	7. 11	·1405					
5. 28	35. 40	7. 20	·1403					
5. 53	35. 50	7. 34	·1403					
6. 28	34. 45	7. 47	·1408					
7. 13	35. 30	8. 18	·1401					
7. 24	34. 55	8. 56	·1405					
7. 30	35. 5	9. 11	·1402					
7. 39	34. 20	9. 21	·1405					
7. 56	35. 40	9. 45	·1403					
8. 11	34. 20	10. 6	·1399					
8. 27	33. 50	10. 42	·1398					
8. 43	34. 5	10. 55	·1406					
9. 2	33. 30	11. 30	·1403					
9. 14	34. 10	11. 42	·1409					
9. 33	33. 15	12. 11	·1403					
9. 47	33. 30	12. 19	·1404					
9. 56	32. 10	12. 44	·1400					
10. 8	32. 40	14. 15	·1399					
10. 13	32. 10	14. 59	·1404					
10. 42	24. 45	15. 43	·1403					
10. 51	27. 0	16. 15	·1407					
11. 8	30. 0	17. 10	·1409					
11. 14	30. 20	17. 22	·1408					
11. 37	32. 30	17. 30	·1410					
11. 42	31. 0	17. 52	·1408					
12. 39	30. 10	18. 40	·1405					
13. 9	31. 20	19. 15	·1406					
13. 14	31. 0	19. 42	·1404					
13. 27	31. 45	20. 3	·1408					
13. 55	31. 45	20. 13	·1405					
14. 29	33. 10	20. 18	·1407					
14. 42	33. 10	20. 58	·1404					
14. 54	32. 35	21. 12	·1409					
14. 58	32. 35	21. 40	·1402					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec.19		Dec. 19						
h m	° ′ ″	h m		h m		h m	°	°
15. 22	20. 34. 40	22. 1	·1402					
15. 42	34. 20	22. 22	·1407					
15. 57	33. 40	22. 40	·1405					
16. 13	33. 15	23. 12	·1407					
16. 38	32. 50	23. 43	·1404					
	***	23. 59	·1407					
17. 13	32. 25							
17. 28	33. 5							
17. 43	33. 10							
17. 58	32. 50							
18. 30	33. 35							
18. 58	33. 35							
19. 9	34. 20							
19. 26	34. 20							
19. 58	35. 0							
20. 9	34. 30							
20. 41	33. 45							
21. 41	34. 40							
22. 26	36. 50							
22. 55	35. 30							
23. 10	36. 20							
23. 55	36. 0							
23. 59	36. 25							
Dec.20		Dec. 20		Dec.20		Dec.20		
0. 0	20. 36. 25	0. 0	·1407	0. 0	·02941	0. 0	57·8	58·2
0. 54	38. 20	0. 41	·1410	1. 15	·02949	Min.	57·8	58·2
1. 26	37. 0	0. 56	·1408	2. 34	·02991	1. 0	58·8	59·5
1. 29	37. 35	1. 10	·1412	7. 41	·03046	2. 0	59·0	59·8
1. 43	36. 30	1. 28	·1405	12. 23	·03031	3. 0	59·3	60·0
2. 24	39. 5	2. 13:	·1409	15. 18	·03049	Max.	59·5	60·7
3. 9	37. 50	2. 45	·1405	15. 32	·03040	9. 0	58·8	59·5
3. 25	36. 50	3. 25	·1399	15. 43	·03049	Min.	58·4	59·4
3. 38	37. 5	3. 52	·1401	16. 34	·03033	21. 0	60·1	61·0
4. 8	39. 55	4. 22	·1394	19. 6	·03056	Max.	60·7	61·7
4. 13	39. 55	4. 54	·1392	21. 4	·03042	22. 0	59·9	60·9
4. 23	39. 10	5. 17	·1395	23. 59	·03057	23. 0	59·9	60·9
4. 36	40. 0	5. 26	·1391					
4. 42	39. 40	6. 0	·1392					
4. 46	40. 5	6. 15	·1388					
5. 10	38. 20	6. 42	·1385					
5. 23	38. 55	7. 5	·1377					
	***	7. 26	·1380					
5. 47	37. 50	7. 41	·1378					
5. 56	36. 35	7. 51	·1381					
6. 3	37. 0	8. 6	·1391					
6. 23	36. 20	8. 16	·1379					
	***	8. 34	·1385					
6. 39	36. 10	8. 43	·1382					
6. 56	37. 30	9. 0	·1387					
7. 11	34. 20	9. 14	·1387					
7. 23	33. 45	9. 27	·1383					
7. 28	34. 30	9. 42	·1391					
7. 39	33. 55	9. 59	·1384					
7. 56	30. 0	10. 21	·1394					
8. 11	33. 20	10. 28	·1392					
8. 14	33. 30	10. 41	·1394					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 20		Dec. 20						
h m	° ′ ″	h m		h m		h m	°	°
8. 27	20. 31. 20	10. 55	·1392					
8. 38	31. 30	11. 40	·1395					
8. 43	30. 25	11. 44	·1392					
9. 23	31. 40	11. 56	·1399					
9. 28	29. 40	12. 40	·1400					
9. 42	30. 30	12. 55	·1396					
9. 56	29. 0	13. 12	·1399					
10. 9	28. 20	13. 42	·1395					
10. 23	29. 25	13. 49	·1397					
10. 27	29. 25	13. 56	·1394					
10. 40	30. 40	14. 24	·1398					
10. 54	30. 10	14. 42	·1389					
11. 24	30. 55	14. 51	·1390					
11. 38	32. 40	15. 16:	·1405					
12. 8	33. 25	15. 36	·1401					
12. 56	33. 10	15. 44	·1406					
	***	15. 53	·1403					
14. 8	32. 55	16. 14	·1414					
14. 28	31. 40	16. 56	·1402					
14. 44	32. 35	17. 18	·1405					
14. 58	34. 0	17. 42	·1397					
15. 24	31. 20	17. 55	·1399					
15. 32	32. 30	18. 26	·1395					
15. 44	35. 50	18. 49	·1400					
15. 54	34. 50	19. 5	·1399					
15. 57	34. 50	19. 13	·1400					
16. 23	30. 0	19. 29	·1395					
16. 36	28. 55	19. 39	·1398					
16. 42	29. 50	19. 55	·1395					
16. 55	29. 50	20. 11	·1399					
17. 9	30. 45	20. 14	·1396					
17. 36	30. 35	20. 25	·1399					
17. 53	33. 15	20. 43	·1397					
18. 8	32. 45	21. 24	·1391					
18. 24	33. 30	21. 43	·1387					
18. 28	32. 40	21. 56	·1393					
18. 39	32. 55	22. 8	·1390					
19. 9	35. 50	22. 14	·1396					
19. 14	35. 15	22. 23	·1393					
19. 58	39. 20	22. 44	·1397					
20. 12	38. 0	23. 39	·1399					
20. 25	38. 15	23. 59	·1400					
20. 34	37. 10							
20. 42	36. 55							
21. 9	33. 30							
21. 25	35. 40							
21. 40	34. 0							
21. 43	33. 10							
21. 58	35. 55							
22. 9	35. 45							
22. 14	36. 55							
22. 25	35. 50							
22. 39	35. 50							
23. 17	33. 15							
23. 40	34. 30							
23. 59	34. 15							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol **:** attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declina-tion.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 21		Dec. 21		Dec. 21		Dec. 21		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 34. 15	0. 0	·1400	0. 0	·03057	0. 0	59·6	60·6
0. 26	34. 55	0. 25	·1398	3. 3	·03066	1. 0	59·4	60·9
0. 54	36. 10	1. 25	·1402	4. 10	·03055	3. 0	59·4	60·9
1. 23	36. 40	1. 56	·1404	16. 34	·03040	Max.	60·5	61·6
1. 42	36. 20	2. 27	·1400	17. 44	·03036	9. 0	59·6	61·4
1. 58	37. 0	3. 11	·1406	19. 28	·03032	Min.	58·7	60·3
2. 13	36. 50	3. 29	·1403	23. 59	·03003	21. 0	58·9	60·3
2. 32	35. 10	3. 51	·1404					
2. 53	34. 55	4. 14	·1401					
3. 11	36. 45	6. 13	·1404					
3. 35	36. 30	10. 11	·1400					
3. 56	36. 50	12. 47	·1395					
4. 38	35. 0	13. 43	·1397					
4. 58	34. 35	14. 0	·1395					
5. 38	34. 50	15. 34	·1405					
6. 57	33. 50	15. 53	·1403					
10. 24	33. 15	16. 49	·1407					
11. 8	32. 45	17. 11	·1404					
12. 2	33. 0	17. 28	·1405					
12. 27	32. 30	17. 59	·1398					
13. 13	33. 20	18. 40	·1398					
13. 43	32. 55	19. 14	·1403					
14. 38	33. 55	19. 48	·1404					
15. 31	33. 50	20. 14	·1400					
16. 13	32. 50	21. 49	·1396					
16. 39	32. 50	22. 44	·1393					
17. 7	34. 30	23. 59	·1399					
17. 26	34. 5							
17. 38	34. 5							
17. 44	34. 55							
18. 8	35. 0							
18. 14	35. 50							
18. 58	33. 30							
19. 28	32. 55							
19. 41	32. 55							
20. 28	32. 25							
21. 38	33. 10							
22. 11	34. 10							
22. 27	33. 55							
22. 40	34. 5							
22. 56	34. 50							
23. 27	35. 20							
23. 38	36. 0							
23. 47	36. 10							
23. 56	36. 30							
23. 59	36. 20							
Dec. 22		Dec. 22		Dec. 22		Dec. 22		
0. 0	20. 36. 20	0. 0	·1399	0. 0	·03003	1. 0	58·8	60·0
1. 26	36. 55	0. 26	·1402	4. 26	·03017	3. 0	58·6	60·0
1. 43	37. 10	1. 51	·1405	9. 4	·03039	Max.	59·5	60·6
2. 11	36. 40	3. 8	·1403	22. 4	·02977	9. 0	58·8	60·4
2. 27	37. 0	3. 52	·1406	23. 59	·02971	Min.	57·8	59·2
2. 52	35. 55	4. 11	·1408			21. 0	58·6	60·0
3. 13	35. 55	5. 10	·1400					
	***	5. 12	·1402					
3. 58	36. 30	7. 12	·1398					
4. 24	37. 20	7. 24	·1403					

Greenwich Mean Solar Time.	Western Declina-tion.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 22		Dec. 22						
h m	° ′ ″	h m		h m		h m	°	°
5. 3	20. 35. 25	7. 41	·1406					
5. 11	36. 0	7. 53	·1397					
5. 15	35. 20	8. 12	·1392					
5. 56	37. 5	8. 51	·1398					
6. 28	35. 55	9. 15	·1396					
6. 56	35. 0	9. 38	·1398					
7. 13	32. 20	10. 10	·1395					
7. 42	33. 50	10. 19	·1397					
8. 42	30. 55	10. 26	·1392					
9. 11	32. 0	10. 54	·1403					
10. 2	32. 10	11. 19	·1394					
10. 13	33. 0	11. 40	·1397					
10. 42	30. 50	11. 45	·1395					
11. 8	32. 5	11. 57	·1397					
11. 11	32. 5	12. 16	·1392					
11. 23	31. 15	12. 27	·1398					
11. 30	31. 40	12. 41	·1396					
11. 44	31. 15	12. 55	·1398					
11. 56	32. 10	13. 54	·1396					
12. 8	31. 40	14. 51	·1398					
12. 52	33. 0	15. 16	·1396					
14. 9	33. 0	15. 25	·1398					
14. 44	34. 5	15. 43	·1397					
15. 9	33. 10	18. 2	·1403					
19. 42	32. 50	20. 25	·1403					
20. 57	31. 45	21. 41	·1396					
22. 57	33. 10	23. 19	·1394					
23. 59	34. 45	23. 59	·1397					
Dec. 23		Dec. 23		Dec. 23		Dec. 23		
0. 0	20. 34. 45	0. 0	·1397	0. 0	·02971	1. 0	59·0	60·3
2. 11	35. 15	0. 40	·1402	2. 56	·03003	3. 0	58·8	60·3
3. 0	34. 0	1. 26	·1404	11. 27	·03002	Max.	59·2	60·5
5. 27	33. 40	4. 19	·1406	16. 56	·03002	9. 0	58·8	60·0
5. 53	34. 20	4. 41	·1408	20. 54	·02988	Min.	58·0	59·8
6. 38	33. 30	5. 10	·1406	23. 59	·02980	22. 20	58·8	60·0
6. 53	33. 45	5. 32	·1409					
8. 46	33. 10	6. 10	·1406					
10. 13	31. 50	6. 23	·1408					
10. 29	32. 25	7. 18	·1404					
10. 46	31. 10	8. 12	·1406					
11. 16	33. 20	8. 33	·1403					
11. 23	33. 0	8. 44	·1405					
11. 30	32. 55	8. 56	·1403					
11. 39	33. 35	9. 4	·1407					
11. 57	32. 25	9. 12	·1403					
12. 30	33. 10	9. 24	·1406					
13. 2	33. 50	9. 52	·1399					
13. 25	33. 40	10. 12	·1398					
13. 39	32. 55	10. 29	·1403					
14. 14	34. 0	10. 57	·1399					
14. 44	33. 25	11. 15	·1405					
14. 59	33. 50	11. 23	·1403					
16. 26	33. 0	11. 41	·1407					
16. 38	33. 30	12. 6	·1403					
17. 38	33. 10	12. 13	·1404					
17. 55	34. 0	12. 29	·1399					
18. 6	33. 30	13. 26	·1402					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 23		Dec. 23						
h m	° ′ ″	h m		h m		h		
19. 28	20. 33. 50	13. 54	·1401					
19. 56	33. 50	16. 34	·1406					
20. 3	33. 15	16. 42	·1408					
20. 28	33. 50	16. 52	·1406					
20. 38	33. 30	17. 7	·1408					
20. 58	33. 30	17. 24	·1405					
21. 25	34. 20	17. 30	·1408					
21. 42	34. 0	17. 42	·1405					
21. 58	35. 10	17. 55	·1408					
22. 11	34. 40	18. 9	·1406					
22. 30	34. 40	18. 14	·1409					
22. 53	35. 30	18. 54	·1408					
23. 37	36. 15	19. 17	·1411					
23. 59	35. 40	19. 50	·1406					
		21. 6	·1408					
		21. 23	·1406					
		21. 59	·1409					
		22. 15	·1407					
		23. 21	·1408					
		23. 59	·1415					
Dec. 24		Dec. 24		Dec. 24		Dec. 24		
0. 0	20. 35. 40	0. 0	·1415	0. 0	·02980	1. 5	59·0	60·1
0. 44	35. 30	0. 24	·1413	1. 1	·02991	Max.	60·0	61·5
1. 8	35. 40	1. 11	·1417	4. 58	·02996	9. 0	59·6	61·1
2. 53	34. 10	1. 26	·1414	9. 39	·03019	Min.	57·6	59·0
5. 52	33. 50	2. 30	·1413	14. 40	·02981	22. 0	58·0	59·1
6. 2	34. 5	2. 43	·1411	23. 59	·02967			
7. 0	33. 30	3. 58	·1413					
8. 27	33. 10	5. 42	·1412					
8. 44	33. 35	5. 50	·1416					
9. 39	33. 10	7. 26	·1414					
10. 8	31. 50	10. 0	·1406					
10. 27	32. 30	11. 23	·1404					
11. 16	31. 0	11. 34	·1406					
11. 30	31. 55	11. 47	·1404					
11. 41	31. 40	13. 54	·1402					
12. 53	32. 40	14. 55	·1408					
13. 7	31. 50	17. 22	·1412					
13. 34	32. 15	19. 13	·1417					
13. 57	32. 0	19. 33	·1414					
14. 8	32. 10	19. 55	·1418					
14. 17	33. 30	21. 0	·1413					
15. 11	32. 30	21. 13	·1414					
15. 26	33. 5	21. 35	·1410					
16. 11	32. 40	21. 56	·1414					
17. 26	33. 0	22. 32	·1410					
17. 57	32. 30	22. 50	·1413					
20. 40	32. 30	23. 0	·1417					
21. 42	34. 10	23. 25	·1416					
22. 26	34. 5	23. 40	·1420					
22. 41	34. 25	23. 46	·1413					
22. 49	33. 50	23. 59	·1418					
23. 19	34. 50							
23. 26	34. 30							
23. 38	35. 5							
23. 44	34. 45							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 24								
h m	° ′ ″	h		h m		h m	°	°
23. 55	20. 35. 40							
23. 59	35. 15							
Dec. 25		Dec. 25		Dec. 25		Dec. 25		
0. 0	20. 35. 15	0. 0	·1418	0. 0	·02967	Min.	58·9	60·4
0. 43	36. 10	0. 11	·1414	2. 33	·03004	1. 0	59·4	61·0
1. 55	35. 20	0. 44	·1416	5. 16	·03023	7. 0	60·0	61·0
2. 3	34. 55	1. 13	·1419	5. 56	·03051	21. 0	60·1	60·5
2. 54	35. 10	1. 46	·1413	12. 15	·03037	Max.	60·5	61·7
3. 10	35. 0	2. 34	·1414	23. 59	·03062			
3. 22	35. 40	3. 33	·1405					
3. 28	36. 40	3. 46	·1406					
3. 50	35. 20	4. 11	·1404					
4. 38	35. 20	4. 14	·1407					
4. 53	35. 35	4. 30	·1404					
5. 8	35. 35	4. 41	·1404					
5. 16	32. 50	5. 24	·1389					
5. 28	29. 10	5. 40	·1389					
5. 44	28. 0	6. 13	·1400					
5. 58	30. 0	6. 41	·1405					
6. 10	31. 30	6. 49	·1404					
6. 56	34. 50	8. 11	·1407					
8. 17	33. 20	8. 32	·1410					
8. 43	33. 10	9. 10	·1405					
8. 57	32. 50	9. 39	·1406					
10. 13	32. 30	9. 50	·1408					
10. 42	32. 55	10. 36	·1404					
11. 12	33. 10	10. 51	·1410					
11. 37	34. 10	11. 14	·1405					
11. 57	33. 10	11. 35	·1410					
12. 27	33. 35	11. 45	·1406					
12. 42	33. 20	12. 30	·1401					
13. 8	33. 50	12. 41	·1404					
13. 32	32. 35	12. 44	·1402					
	***	13. 11	·1407					
15. 38	33. 10	13. 56	·1403					
15. 57:	32. 40	14. 8	·1407					
16. 43	33. 35	14. 22	·1405					
17. 38	33. 30	15. 1	·1408					
17. 46	32. 40	15. 11	·1406					
17. 56	33. 10	15. 18	·1408					
18. 4	32. 30	15. 21	·1406					
18. 34	32. 40	15. 29	·1409					
18. 52	32. 15	16. 42	·1408					
19. 9	33. 5	16. 50	·1410					
19. 23	32. 30	17. 12	·1408					
20. 19	32. 30	17. 40	·1412					
21. 28	35. 0	17. 52	·1410					
21. 53	37. 10	17. 57	·1413					
21. 57	37. 20	18. 13	·1410					
22. 13	37. 0	18. 30	·1412					
23. 8	40. 20	19. 12	·1413					
23. 53	39. 30	19. 41	·1408					
23. 59	39. 55	20. 3	·1404					
		20. 12	·1406					
		21. 11	·1403					
		21. 25	·1398					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
		Dec. 25						
h m	° ′ ″	h m		h m		h m	°	°
		22. 36	·1400					
		22. 40	·1395					
		23. 0	·1392					
		23. 18	·1396					
		23. 24	·1394					
		23. 40	·1398					
		23. 59	·1397					
Dec. 26		Dec. 26		Dec. 26		Dec. 26		
0. 0	20. 39. 55	0. 0	·1397	0. 0	·03062	1. 0	60 ·1	61 ·0
0. 20	39. 30	0. 19	·1396	0. 38	·03059	3. 0	60 ·6	61 ·9
0. 25	39. 30	0. 41	·1399		·03124	Max.	60 ·9	62 ·0
1. 24	35. 20	0. 46	·1396	7. 25	·03149	9. 0	60 ·5	61 ·5
2. 15	35. 20	0. 58	·1400	15. 19	·03098	Min.	58 ·3	59 ·5
3. 11	33. 40	1. 3	·1398	19. 27	·03080	21. 0	59 ·0	60 ·1
3. 26	33. 50	1. 11	·1403	23. 59	·03043	22. 0	58 ·8	60 ·0
4. 23	32. 55	1. 22	·1399			23. 0	58 ·7	59 ·8
5. 43	33. 30	3. 12	·1403					
5. 56	33. 10	3. 28	·1400					
6. 26	33. 20	3. 59	·1398					
6. 57	32. 10	4. 41	·1402					
7. 18	30. 25	4. 57	·1400					
7. 53	32. 25	6. 55	·1397					
8. 58	31. 50	7. 12	·1394					
12. 28	32. 5	7. 45	·1400					
12. 45	32. 40	8. 47	·1398					
13. 13	32. 55	9. 53	·1400					
13. 26	32. 25	10. 9	·1402					
13. 41	33. 0	10. 42	·1398					
13. 52	32. 50	10. 56	·1401					
14. 24	33. 10	11. 15	·1400					
14. 39	34. 20	11. 24	·1402					
14. 57	33. 15	11. 56	·1400					
15. 24	31. 50	12. 13	·1403					
15. 54	31. 15	12. 48	·1401					
16. 29	31. 50	13. 14	·1403					
16. 56	31. 40	13. 28	·1400					
17. 11	30. 45	14. 10	·1403					
17. 40	31. 30	14. 25	·1407					
17. 43	30. 55	14. 53	·1406					
17. 59	31. 40	15. 9	·1409					
18. 55	31. 40	15. 25	·1405					
19. 7	32. 10	18. 41	·1412					
19. 12	31. 50	19. 22	·1411					
19. 31	32. 20	19. 43	·1413					
19. 55	32. 10	20. 11	·1411					
20. 58	33. 5	20. 18	·1412					
21. 26	33. 5	21. 14	·1406					
21. 41	33. 35	21. 49	·1404					
21. 55	33. 25	22. 41	·1396					
22. 9	33. 50	23. 43	·1398					
22. 13	33. 20	23. 59	·1403					
22. 44	36. 40							
23. 28	37. 55							
23. 59	35. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 27		Dec. 27		Dec. 27		Dec. 27		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 35. 15	0. 0	·1403	0. 0	·03043	0. 0	58 ·6	59 ·6
0. 12	35. 15	0. 13	·1407	5. 27	·03052	1. 0	58 ·6	59 ·0
0. 27	37. 0	0. 26	·1405	14. 44	·03022	2. 0	58 ·6	59 ·0
0. 41	37. 40	0. 43	·1406	15. 9	·03011	3. 0	58 ·6	59 ·0
0. 57	38. 5	1. 11	·1407	22. 3	·02994	Max.	59 ·5	60 ·4
2. 29	35. 40	1. 44	·1400	22. 24	·03002	9. 0	58 ·8	59 ·4
3. 9	35. 40	2. 26	·1402	23. 59	·02986	21. 0	57 ·9	58 ·5
3. 24	36. 10	2. 39	·1404			22. 0	57 ·9	58 ·1
3. 58	34. 30	2. 56	·1402			23. 0	57 ·4	57 ·9
4. 21	33. 50	3. 12	·1404			Min.	57 ·4	57 ·9
4. 38	32. 0	3. 30	·1396					
4. 59	32. 15	4. 13	·1399					
5. 14	32. 55	4. 27	·1393					
6. 26	33. 10	5. 12	·1405					
6. 43	32. 55	6. 24	·1406					
7. 28	32. 30	6. 59	·1403					
10. 54	32. 35	7. 24	·1406					
11. 11	32. 20	7. 54	·1404					
11. 44	32. 55	9. 0	·1405					
12. 26	32. 25	9. 11	·1408					
13. 57	33. 15	9. 21	·1405					
14. 28	33. 5	10. 48	·1403					
14. 53	36. 50	11. 0	·1405					
15. 12	32. 40	11. 25	·1402					
15. 28	32. 5	12. 26	·1403					
16. 26	33. 0	12. 52	·1401					
16. 39	32. 30	14. 41	·1403					
16. 58	32. 45	15. 2	·1412					
17. 11	32. 20	15. 24	·1407					
17. 50	32. 45	15. 39	·1408					
17. 58	32. 30	15. 56	·1404					
18. 10	33. 5	18. 11	·1419					
18. 56	32. 20	21. 0	·1406					
19. 10	33. 5	21. 14	·1412					
19. 23	32. 25	21. 39	·1404					
19. 43	32. 25	22. 12	·1405					
20. 32	31. 30	22. 42	·1387					
21. 26	32. 15	23. 38	·1398					
21. 39	32. 40	23. 59	·1403					
21. 46	32. 30							
	***							
22. 54	33. 35							
	(†)							
Dec. 28		Dec. 28		Dec. 28		Dec. 28		
	(†)	0. 0	·1403	0. 0	·02986	0. 0	57 ·8	58 ·0
1. 0	20. 36. 55*	0. 10	·1407	1. 11	·03005	Min.	57 ·8	58 ·0
3. 0	34. 48*	0. 34	·1413	5. 24	·02997	1. 0	57 ·8	58 ·0
3. 29	32. 30	0. 57	·1412	12. 3	·03042	2. 0	57 ·8	58 ·0
3. 44	32. 25	1. 11	·1415	13. 57	·03021	3. 0	57 ·8	58 ·5
3. 59	33. 0	1. 55	·1408	21. 55	·03029	9. 0	58 ·8	60 ·0
5. 14	33. 10	2. 23	·1402	23. 59	·03065	21. 0	59 ·6	60 ·5
5. 41	33. 20	2. 43	·1406			Max.	59 ·7	60 ·5
5. 49	33. 0	3. 0	·1404					
6. 10	33. 40	3. 11	·1406					
6. 27	32. 50	3. 25	·1403					
6. 43	33. 25	4. 6	·1410					
7. 13	33. 5	4. 56	·1410					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 28		Dec. 28						
h m	° ′ ″	h m		h m		h m	°	°
7. 19	20. 33. 20	5. 14	·1413					
7. 41	32. 50	5. 30	·1410					
7. 58	33. 10	5. 45	·1412					
8. 26	32. 45	6. 11	·1407					
9. 11	33. 15	6. 28	·1409					
9. 27	31. 35	6. 58	·1406					
9. 38	31. 30	7. 15	·1409					
9. 44	32. 30	7. 30	·1406					
10. 12	31. 15	9. 11	·1404					
10. 26	30. 25	9. 39	·1406					
10. 56	31. 55	9. 52	·1403					
11. 8	31. 40	10. 13	·1404					
11. 21	32. 0	10. 52	·1399					
11. 32	33. 0	11. 24	·1400					
11. 39	33. 0	11. 42	·1399					
11. 44	33. 15	11. 52	·1404					
11. 54	33. 0	11. 56	·1403					
12. 10	35. 20	12. 11	·1409					
12. 26	34. 20	12. 46	·1403					
12. 43	34. 25	13. 9	·1410					
12. 58	31. 25	13. 41	·1403					
13. 9	32. 15	13. 48	·1399					
13. 28	31. 20	13. 54	·1402					
13. 38	31. 20	14. 6	·1397					
13. 51	29. 50	14. 25	·1403					
14. 0	31. 10	14. 44	·1399					
14. 13	31. 10	14. 54	·1402					
14. 28	32. 45	15. 12	·1400					
	***	17. 58	·1409					
14. 56	32. 0	19. 43	·1412					
15. 9	31. 30	19. 53	·1409					
15. 56	32. 55	19. 58	·1411					
16. 13	32. 25	20. 7	·1406					
16. 39	32. 40	20. 18	·1413					
17. 8	32. 45	20. 57	·1407					
17. 12	32. 25	21. 11	·1412					
17. 26	32. 55	21. 24	·1411					
17. 44	33. 0	21. 43	·1413					
17. 56	32. 45	22. 5	·1404					
18. 23	32. 55	22. 12	·1409					
18. 43	32. 30	22. 24	· 406					
18. 58	32. 45	22. 43	·1411					
19. 16	32. 30		(†)					
19. 52	33. 15							
19. 56	32. 50							
20. 6	33. 25							
20. 13	32. 35							
20. 55	33. 40							
21. 10	32. 30							
21. 58	34. 40							
22. 10	33. 15							
22. 14	34. 30							
22. 42	34. 55							
	(†)							
Dec. 29		Dec. 29		Dec. 29		Dec. 29		
	(†)		(†)	0. 0	·03065	1. 0	61 ·6	62 ·5
1. 0	20. 37. 12*	3. 0	·1365*	3. 31	·03101	3. 0	62 ·2	62 ·1

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 29		Dec. 29		Dec. 29		Dec. 29		
h m	° ′ ″	h m		h m		h m	°	°
3. 0	20. 34. 20*	3. 5	·1365	7. 9	·03082	Max.	62°·3	62°·7
3. 9	33. 15	3. 54	·1369	10. 7	·03103	9. 0	60 ·7	62 ·0
3. 30	32. 50	4. 32	·1367	12. 23	·03088	Min.	58 ·9	59 ·9
3. 56	33. 10	5. 12	·1371	12. 44	·03097	21. 0	59 ·3	60 ·2
4. 14	32. 40	5. 43	·1369	21. 14	·03048			
4. 26	33. 10	6. 12	·1362		(†)			
4. 44	32. 45	6. 34	·1367					
5. 12	33. 10	7. 2	·1369					
5. 43	33. 5	7. 41	·1367					
5. 54	32. 30	8. 44	·1358					
5. 59	33. 0	9. 18	·1363					
6. 14	32. 40	9. 41	·1361					
6. 30	33. 5	9. 58	·1358					
6. 53	32. 30	10. 14	·1360					
7. 11	33. 0	10. 30	·1357					
7. 24	32. 30	10. 42	·1357					
8. 3	33. 5	11. 18	·1368					
8. 12	32. 30	11. 53	·1365					
8. 26	32. 25	12. 41	·1351					
8. 37	29. 0	12. 57	·1356					
8. 42	27. 30	13. 17	·1353					
8. 58	28. 0	13. 56	·1357					
9. 14	30. 10	14. 20	·1355					
9. 28	29. 0	14. 53	·1359					
9. 40	30. 5	15. 9	·1357					
10. 11	31. 40	15. 41	·1362					
10. 23	30. 50	17. 11	·1368					
10. 32	31. 0	17. 44	·1370					
10. 55	26. 35	18. 43	·1366					
11. 40	23. 15	19. 14	·1369					
11. 50	23. 40	19. 44	·1372					
11. 56	22. 30	20. 40	·1368					
12. 2	23. 30	21. 13	·1361					
12. 24	21. 45	21. 41	·1362					
12. 42	25. 40	22. 41	·1363					
12. 55	25. 40	22. 56	·1368					
13. 8	26. 20	23. 13	·1372					
13. 10	26. 10	23. 42	·1371					
13. 39	28. 50	23. 59	·1369					
13. 52	28. 40							
14. 28	31. 0							
14. 39	31. 0							
14. 55	32. 30							
15. 2	32. 5							
15. 13	32. 40							
15. 55	31. 45							
16. 26	32. 15							
16. 51	30. 35							
17. 27	31. 55							
17. 39	31. 0							
18. 56	32. 20							
19. 13	34. 0							
19. 41	33. 10							
19. 53	33. 25							
20. 25	32. 35							
20. 56	31. 20							
21. 43	32. 40							
22. 26	32. 30							
23. 9	33. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

December 29. The Horizontal Force Magnet was under adjustment till 3^h.

December 29^d. 22^h. The Vertical Force Magnet was examined by Mr. Simms.

Greenwich Mean Solar Time.	Western Declination.
Dec. 29	
h m	° ′ ″
23. 24	20. 35. 0
23. 41	35. 45
23. 59	35. 0
Dec. 30	
0. 0	20. 35. 0
0. 59	36. 45
1. 39	35. 40
1. 56	36. 10
2. 7	36. 10
2. 12	35. 40
2. 29	35. 50
3. 9	34. 15
3. 22	35. 20
3. 44	33. 20
4. 3	33. 50
4. 14	33. 50
4. 59	31. 45
5. 44	32. 30
5. 56	32. 30
6. 8	32. 55
6. 33	32. 0
6. 53	30. 25
7. 15	30. 15
7. 43	30. 55
7. 58	30. 40
8. 12	29. 30
8. 44	29. 40
9. 24	29. 15
9. 37	28. 55
9. 51	29. 25
10. 29	28. 25
10. 55	28. 40
11. 9	28. 10
11. 56	29. 20
12. 45	30. 15
12. 56	30. 40
13. 11	30. 20
13. 45	31. 30
15. 40	31. 30
15. 46	30. 55
16. 28	31. 30
16. 42	30. 55
18. 8	30. 30

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Dec. 30	
0. 0	·1369
0. 37	·1375
1. 19	·1372
1. 54	·1369
2. 14	·1362
2. 45	·1365
3. 3	·1362
3. 24	·1365
3. 41	·1371
3. 52	·1368
4. 15	·1371
4. 34	·1368
4. 59	·1375
6. 39	·1366
6. 52	·1363
7. 46	·1365
8. 10	·1368
8. 12	·1365
8. 29	·1368
9. 8	·1366
9. 56	·1369
11. 40	·1370
12. 11	·1373
12. 19	·1371
12. 42	·1376
12. 57	·1374
13. 16	·1376
13. 41	·1373
18. 22	·1379
19. 26	·1377
22. 54	·1374
23. 59	·1377

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Dec. 30	
	(†)
0. 27	·03700
3. 19	·03722 ·03806
8. 41	·03798
15. 31	·03748
23. 59	·03730

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Dec. 30		
1. 0	60 ·1	60 ·4
3. 0	59 ·6	60 ·0
Max.	60 ·5	61 ·2
9. 0	59 ·3	59 ·5
Min.	58 ·2	59 ·4
22. 15	59 ·2	60 ·2

Greenwich Mean Solar Time.	Western Declination.
Dec. 30	
h m	° ′ ″
18. 13	20. 30. 10
18. 28	30. 50
18. 54	30. 0
19. 40	30. 20
21. 8	28. 30
21. 54	29. 20
21. 59	29. 5
22. 14	29. 55
22. 26	29. 35
23. 59	32. 30
Dec. 31	
0. 0	20. 32. 30
1. 44	33. 15
3. 23	31. 45
7. 12	30. 30
7. 35	31. 10
8. 9	30. 40
8. 15	29. 30
8. 37	30. 10
8. 57	28. 45
9. 25	30. 10
9. 53	29. 40
10. 11	30. 0
10. 23	29. 50
10. 43	30. 35
10. 58	30. 10
11. 37	30. 10
11. 43	29. 30
14. 11	30. 50
15. 8	31. 20
17. 11	30. 50
17. 45	30. 5
20. 10	29. 10
21. 0	28. 30
21. 41	28. 30
22. 29	30. 20
22. 56	31. 10
23. 1	31. 0
23. 9	30. 15
23. 18	31. 35
23. 42	31. 45
23. 59	33. 15

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h	
Dec. 31	
0. 0	·1377
1. 0	·1379
2. 57	·1377
6. 12	·1379
7. 45	·1374
7. 55	·1376
8. 13	·1374
9. 29	·1373
9. 54	·1375
10. 12	·1374
10. 27	·1376
11. 2	·1374
14. 27	·1376
17. 44	·1384
20. 4	·1382
21. 50	·1374
22. 56	·1375
23. 15	·1383
23. 35	·1379
23. 59	·1382

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Dec. 31	
0. 0	·03730
3. 25	·03756
14. 31	·03734
23. 1	·03692
23. 59	·03686

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h	°	°
Dec. 31		
1. 0	59 ·6	60 ·7
Max.	60 ·0	60 ·8
9. 0	59 ·4	60 ·3
Min.	58 ·2	58 ·9
21. 0	58 ·8	59 ·2

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

December 30^{d}. 0^{h}. 15^{m}. VERTICAL FORCE.—The adjustments were altered, so that the readings were increased by $10^{\mathrm{div}}\cdot68$, or by 0·007253 parts of the whole Vertical Force.

TABLE showing the APPROXIMATE MEAN MONTHLY DECLINATION, at the ROYAL OBSERVATORY, GREENWICH, in the Year 1865.

MONTH.	1865.
	° ′ ″
January	....
February	20. 31. 6
March	32. 25
April	33. 38
May	33. 51
June	30. 36
July	31. 27
August	33. 1
September	33. 1
October	34. 11
November	32. 56
December	33. 18
Mean	20. 32. 43

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

OBSERVATIONS

OF THE

MAGNETIC DIP.

1865.

MAGNETIC DIP, observed at the ROYAL OBSERVATORY, GREENWICH, chiefly with AIRY'S DIP APPARATUS, in the Year 1865.

Day and Approximate Hour, 1865.		Needle.	Length of Needle.	Magnetic Dip.	Observer.
	d h			° ′ ″	
January	9. 2	B 1	9 inches	68. 3.41	N
	23. 2	B 2	9 ,,	68. 5. 1	N
	25. 0	B 1	9 ,,	68. 1.24	N
	25. 1	B 3	9 ,,	68. 4. 5	N
February	11. 2	C 1	6 ,,	68. 0.43	N
	14. 2	C 2	6 ,,	68. 1.50	N
	15. 0	C 4	6 ,,	(67.58.22)	N
	15. 1	C 3	6 ,,	67.49.27	N
	23. 2	C 1	6 ,,	68. 4.28	N
	27. 1	C 2	6 ,,	68. 2.18	N
	27. 2	C 4	6 ,,	(68. 0.12)	N
	28. 0	D 4	3 ,,	(68. 5.52)	N
	28. 0	C 1	6 ,,	68. 3.14	N
	28. 1	B 1	9 ,,	67.55.43	N
March	11. 2	D 1	3 ,,	68.12.56	N
	16. 1	D 2	3 ,,	68. 4.15	N
	16. 2	D 4	3 ,,	(68. 2.54)	N
	21. 2	D 2	3 ,,	68. 8.38	N
	21.23	D 4	3 ,,	(68. 4. 0)	N
	21.23	D 1	3 ,,	68.10.10	N
	22. 2	D 2	3 ,,	68. 6.27	N
	31. 2	D 3	3 ,,	68. 4.28	N
	31. 3	B 1	9 ,,	68. 1.13	N
April	6. 2	B 1	9 ,,	68. 2.19	N
	10. 2	B 2	9 ,,	68. 1.37	N
	18. 1	B 1	9 ,,	68. 3.12	N
	22. 2	C 1	6 ,,	67.59.59	N
	26. 2	B 2	9 ,,	68. 0.49	N
	28.23	B 3	9 ,,	68.10.16	N
	29. 1	B 4	9 ,,	(67.51.32)	N
	29. 2	D 4	3 ,,	(68. 1. 5)	N
May	12. 2	C 1	6 ,,	67.57.25	N
	13. 2	C 2	6 ,,	68. 5.46	N
	18. 2	C 4	6 ,,	(68. 1. 1)	N
	27. 2	C 1	6 ,,	67.58.44	N
	29. 0	C 2	6 ,,	68. 2. 4	N
	29. 1	C 3	6 ,,	68. 1.32	N
	29. 2	C 4	6 ,,	(67.57.46)	N
	29.23	D 4	3 ,,	(67.56.30)	N
	30. 1	D 2	3 ,,	68. 4. 4	N
June	7. 2	D 4	3 ,,	(67.55.49)	N
	7.22	D 3	3 ,,	68. 3.17	N
	7.23	D 2	3 ,,	68. 5.17	N
	8. 0	D 1	3 ,,	67.45.42	N
	8. 1	C 2	6 ,,	68. 3.10	N
	14. 1	D 1	3 ,,	68.20.33	N
	14. 2	D 2	3 ,,	68. 7.24	N
	16. 2	D 4	3 ,,	(67.58.34)	N
	17. 1	C 4	6 ,,	(67.55.38)	N
June	20. 2	C 1	6 inches	68. 1. 4	N
	21. 0	B 1	9 ,,	68. 0.12	N
	27. 1	B 2	9 ,,	68. 1. 2	N
July	1. 0	B 4	9 ,,	(67.43.35)	N
	14. 1	B 1	9 ,,	68. 1.50	N
	19. 0	C 1	6 ,,	68. 0.47	N
	26. 1	C 2	6 ,,	68. 1.33	N
	26. 2	D 2	3 ,,	68. 2.39	N
August	12. 0	C 1	6 ,,	67.59.16	N
	12. 2	C 2	6 ,,	68. 3.57	N
	17. 0	D 2	3 ,,	68. 8.26	N
	17.23	B 1	9 ,,	68. 4.56	N
	18. 0	B 2	9 ,,	68. 2.38	N
	30. 2	C 1	6 ,,	67.55.57	N
	31. 2	C 2	6 ,,	68. 1.42	N
September	5.22	B 1	9 ,,	68. 0.24	N
	5.23	B 2	9 ,,	68. 0.35	N
	6. 0	C 1	6 ,,	67.55.50	N
	6. 1	C 2	6 ,,	68. 0. 3	N
	6. 2	D 1	3 ,,	68.15.16	N
	6. 2	D 2	3 ,,	67.58.33	N
	15. 1	C 1	6 ,,	68. 4.24	N
	15. 1	C 2	6 ,,	68. 2.21	N
	15. 2	D 2	3 ,,	68. 1.40	N
	19.23	B 1	9 ,,	68. 2.37	N
	20. 1	B 2	9 ,,	68. 3.46	N
	23. 0	D 2	3 ,,	68. 3.17	N
	27. 2	D 2	3 ,,	68. 0.52	M R
	27.23	B 1	9 ,,	68. 1.28	M R
October	12. 2	D 2	3 ,,	68. 4.47	N
	23. 2	C 2	6 ,,	67.58. 1	N
	24. 2	C 1	6 ,,	67.57.36	N
	25. 1	B 1	9 ,,	68. 3.41	N
	25. 2	D 2	3 ,,	68. 2.41	N
November	10. 0	D 2	3 ,,	68. 4.10	M R
	10. 1	C 2	6 ,,	68. 5.19	M R
	10. 2	D 2	3 ,,	68. 4.31	N
	11. 0	D 2	3 ,,	68. 5.21	M R
	12.23	C 1	6 ,,	68. 5.38	M R
	15. 0	42, A 1	3½ ,,	68. 6. 0	N
	16. 0	42, A 1	3½ ,,	68. 3.53	N
	16. 0	42, A 2	3½ ,,	68. 6.53	N
	16. 2	D 2	3 ,,	68. 5.52	N
	30. 2	C 2	6 ,,	68. 5.45	N
December	11. 2	C 1	6 ,,	68. 7.15	N
	14. 1	D 2	3 ,,	68. 3.48	N
	14. 2	D 1	3 ,,	68. 6.32	N
	21. 0	B 1	9 ,,	68. 3. 4	N
	21. 1	B 2	9 ,,	67.59.44	N
	21. 2	C 2	6 ,,	68. 5.42	N

The initials N and M R are respectively those of Mr W. C. Nash, and Lieut. M. Rikatcheff of the Russian Imperial Navy.

The flat needles B^4, C^4, and D^4 were not used for determination of the Dip after the month of July.

On November 15 and 16, three observations were made with a Kew Dip-Circle, marked 42, which had been brought to the Royal Observatory for trial, by Captain Belavenetz, Director of the Compass Observatory at Cronstadt.

December 30. The needles C^1 and D^1 were taken away by Mr Simms, for the purpose of setting their axes in perfect working order;—returned 1866, January 25.

MONTHLY MEANS of MAGNETIC DIPS at the ROYAL OBSERVATORY, GREENWICH, with AIRY'S DIP APPARATUS, in the Year 1865.

Month, 1865.	B 1, 9-inch Needle.	Number of Observations.	B 2, 9-inch Needle.	Number of Observations.	B 3, 9-inch Needle, loaded.	Number of Observations.	B 4, 9-inch Needle.	Number of Observations.	C 1, 6-inch Needle.	Number of Observations.	C 2, 6-inch Needle.	Number of Observations.
	° ′ ″		° ′ ″		° ′ ″		° ′ ″		° ′ ″		° ′ ″	
January...	68. 2.32	2	68. 5. 1	1	68. 4. 5	1	....	..	....	..	....	..
February..	67.55.43	1	....	..	....	..	....	..	68. 2.48	3	68. 2. 4	2
March	68. 1.13	1	....	..	....	..	....	..	....	..	....	..
April	68. 2.45	2	68. 1.13	2	68.10.16	1	(67.51.32)	1	67.59.59	1	....	..
May	....	..	....	..	....	..	....	..	67.58. 5	2	68. 3.55	2
June	68. 0.12	1	68. 1. 2	1	....	..	....	..	68. 1. 4	1	68. 3.10	1
July......	68. 1.50	1	....	..	....	..	(67.43.35)	1	68. 0.47	1	68. 1.33	1
August ...	68. 4.56	1	68. 2.38	1	....	..	....	..	67.57.36	2	68. 2.50	2
September.	68. 1.30	3	68. 2.10	2	....	..	....	..	68. 0. 7	2	68. 1.12	2
October ...	68. 3.41	1	....	..	....	..	....	..	67.57.36	1	67.58. 1	1
November .	....	..	....	..	....	..	....	..	68. 5.38	1	68. 5.32	2
December .	68. 3. 4	1	67.59.44	1	....	..	....	..	68. 7.15	1	68. 5.42	1
Means.	68. 1.50	Sum 14	68. 1.54	Sum 8	....	..	....	..	68. 0.49	Sum 15	68. 2.49	Sum 14

Month, 1865.	C 3, 6-inch Needle, loaded.	Number of Observations.	C 4, 6-inch Needle.	Number of Observations.	D 1, 3-inch Needle.	Number of Observations.	D 2, 3-inch Needle.	Number of Observations.	D 3, 3-inch Needle, loaded.	Number of Observations.	D 4, 3-inch Needle.	Number of Observations.
	° ′ ″		° ′ ″		° ′ ″		° ′ ″		° ′ ″		° ′ ″	
January...	....	..	....	..	....	..	....	..	....	..	....	..
February..	67.49.27	1	(67.59.17)	2	....	..	....	..	....	..	(68. 5.52)	1
March	....	..	....	..	68.11.33	2	68. 6.27	3	68. 4.28	1	(68. 3.27)	2
April	....	..	....	..	....	..	....	..	....	..	(68. 1. 5)	1
May	68. 1.32	1	(67.59.24)	2	....	..	68. 4. 4	1	....	..	(67.56.30)	1
June	....	..	(67.55.38)	1	68. 3. 8	2	68. 6.20	2	68. 3.17	1	(67.57.12)	2
July......	....	..	....	..	....	..	68. 2.39	1	....	..	....	..
August ...	....	..	....	..	....	..	68. 8.26	1	....	..	....	..
September.	....	..	....	..	68.15.16	1	68. 1. 6	4	....	..	....	..
October ...	....	..	....	..	....	..	68. 3.44	2	....	..	....	..
November .	....	..	....	..	....	..	68. 4.59	4	....	..	....	..
December .	....	..	....	..	68. 6.32	1	68. 3.48	1	....	..	....	..
Means.	....	..	....	..	....	..	68. 4.21	Sum 19	....	..	....	..

For this table the monthly means have been formed without reference to the hour at which the observation was made on each day, as in preceding years no certain difference was found between observations taken at 21^h and at 3^h.

In combining the monthly results, to form the annual means, weights have been given proportional to the number of observations.

YEARLY MEANS of MAGNETIC DIPS for each of the NEEDLES, and GENERAL MEAN for the Year 1865.

Lengths of the several Sets of Needles.	Needles.	Number of Observations with each Needle.	Mean Yearly Dip from Observations with each Needle.	Mean Yearly Dip from each Set of Needles.	Mean Yearly Dip from all the Sets of Needles.
			° ′ ″	° ′ ″	° ′ ″
9-inch Needles	B 1	14	68. 1. 50	68. 1. 51	68. 2. 40
	B 2	8	68. 1. 54		
6-inch Needles	C 1	15	68. 0. 49	68. 1. 47	
	C 2	14	68. 2. 49		
3-inch Needle	D 2	19	68. 4. 21	68. 4. 21	

In determining the Mean Yearly Dip from each set of needles, weights proportional to the number of observations with each needle have been given.

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS

OF

DEFLEXION OF A MAGNET

FOR

ABSOLUTE MEASURE

OF

HORIZONTAL FORCE.

1865.

ABSTRACT of the OBSERVATIONS of DEFLEXION of a MAGNET for ABSOLUTE MEASURE of HORIZONTAL FORCE, made with the KEW UNIFILAR INSTRUMENT.

Month and Day. 1865.		Distances of Centers of Magnets.	Temperature.	Observed Deflexion.	Mean of the Times of Vibration of Deflecting Magnet.	Number of Vibrations.	Temperature.	Observer.
		ft.	°	° ′ ″			°	
January	25	1·0 1·3	35·8	14. 16. 58 6. 27. 12	5·021 5·018	100 100	39·1 38·3	N
February	23	1·0 1·3	46·1	14. 16. 0 6. 20. 55	5·038 5·030	100 100	48·8 49·3	N
February	28	1·0 1·3	51·1	14. 14. 2 6. 25. 56	5·023 5·024	100 100	56·6 55·1	N
March	28	1·0 1·3	42·8	14. 13. 46 6. 26. 19	5·024 5·020	100 100	45·0 47·1	N
April	11	1·0 1·3	65·7	14. 8. 22 6. 23. 40	5·031 5·033	100 100	69·6 66·4	N
April	28	1·0 1·3	72·9	14. 8. 35 6. 23. 31	5·027 5·033	100 100	74·4 76·9	N
May	26	1·0 1·3	72·7	14. 5. 35 6. 22. 20	5·031 5·042	100 100	74·7 75·0	N
June	7	1·0 1·3	74·1	14. 6. 55 6. 22. 59	5·052 5·040	100 100	75·4 78·3	N
June	20	1·0 1·3	72·8	14. 4. 48 6. 22. 46	5·047 5·053	100 100	72·9 77·0	N
August	16	1·0 1·3	67·9	12. 46. 36 5. 47. 0	5·299 5·303	100 100	68·9 68·6	N
August	31	1·0 1·3	70·2	12. 43. 30 5. 45. 35	5·298 5·300	100 100	70·0 71·1	N
September	21	1·0 1·3	63·1	12. 45. 50 5. 46. 51	5·304 5·299	100 100	64·0 65·9	N
October	16	1·0 1·3	58·7	12. 43. 28 5. 46. 4	5·314 5·318	100 100	66·4 63·4	M R
October	17	1·0 1·3	64·8	12. 43. 56 5. 45. 41	5·315 5·314	100 100	67·7 64·3	M R
October	28	1·0 1·3	51·5	12. 43. 56 5. 45. 50	5·310 5·316	100 100	52·0 52·0	M R
October	28	1·0 1·3	52·9	12. 43. 50 5. 45. 42	5·310 5·316	100 100	52·0 52·0	M R
October	31	1·0 1·3	50·4	12. 46. 0 5. 46. 59	5·317 5·312	100 100	54·3 52·1	N
October	31	1·0 1·3	50·0	12. 46. 6 5. 46. 56	5·317 5·312	100 100	54·3 52·1	N
November	29	1·0 1·3	48·8	12. 43. 55 5. 46. 3	5·300 5·309	100 100	50·0 51·3	N
December	20	1·0 1·3	48·0	12. 43. 35 5. 45. 58	5·304 5·296	100 100	48·4 50·5	N

The position of the Deflecting Magnet with regard to the suspended Magnet is always that which was formerly termed "Lateral." The Deflecting Magnet is placed on the East side of the suspended Magnet, with its marked pole alternately E. and W., and it is placed on the West side with its pole alternately E. and W. ; and the deflexion in the table above is the mean of the four deflexions observed in those positions of the magnets.

The lengths of 1 foot and 1·3 foot answer to 304·8 and 396·2 millimètres respectively.

The initials N and M R are respectively those of Mr. W. C. Nash, and Lieutenant M. Rikatcheff of the Russian Imperial Navy.

In the following calculations, every observation is reduced to the temperature 35°.

COMPUTATION of the VALUES of ABSOLUTE MEASURE of HORIZONTAL FORCE, from OBSERVATIONS with the KEW UNIFILAR INSTRUMENT.

Month and Day, 1865.		In English Measure.									Value of X in French Measure.
		Apparent Value of A^1.	Apparent Value of A^2.	Apparent Value of P.	Mean Value of P.	Log. A corrected by the Application of Mean Value of P. = Log. $\frac{m}{X}$	Adopted Time of Vibration of Deflecting Magnet.	Log. m X.	Value of X.	Value of m.	
January	25	+0·12336	0·12346	−0·00199	−0·00355	9·09256	5·0195	0·25885	3·830	0·4739	1·766
February	23	+0·12343	0·12358	−0·00298		9·09290	5·0340	0·25701	3·820	0·4731	1·761
	28	+0·12325	0·12337	−0·00239		9·09223	5·0235	0·25925	3·833	0·4740	1·767
March	28	+0·12304	0·12332	−0·00559		9·09177	5·0220	0·25885	3·833	0·4735	1·767
April	11	+0·12276	0·12296	−0·00400		9·09064	5·0320	0·25864	3·837	0·4728	1·769
	28	+0·12295	0·12307	−0·00239		9·09117	5·0300	0·25921	3·837	0·4734	1·769
May	26	+0·12252	0·12268	−0·00320		9·08972	5·0365	0·25799	3·838	0·4719	1·770
June	7	+0·12274	0·12292	−0·00360		9·09053	5·0460	0·25633	3·827	0·4714	1·765
	20	+0·12241	0·12283	−0·00844		9·08979	5·0500	0·25552	3·827	0·4706	1·765
August	16	+0·11118	0·11129	−0·00243		9·04747	5·3010	0·21287	3·826	0·4268	1·764
	31	+0·11078	0·11088	−0·00221		9·04590	5·2990	0·21335	3·835	0·4262	1·768
September	21	+0·11098	0·11115	−0·00376		9·04681	5·3015	0·21256	3·827	0·4263	1·765
October	16	+0·11056	0·11081	−0·00556		9·04532	5·3160	0·21010	3·823	0·4243	1·763
	17	+0·11074	0·11081	−0·00155		9·04566	5·3145	0·21043	3·823	0·4247	1·763
	28	+0·11049	0·11060	−0·00244		9·04477	5·3130	0·20971	3·824	0·4239	1·763
	28	+0·11050	0·11059	−0·00199		9·04476	5·3130	0·20971	3·824	0·4239	1·763
	31	+0·11076	0·11095	−0·00421		9·04599	5·3145	0·20956	3·818	0·4244	1·760
	31	+0·11077	0·11093	−0·00355		9·04595	5·3145	0·20956	3·818	0·4244	1·760
November	29	+0·11044	0·11062	−0·00400		9·04470	5·3045	0·21100	3·830	0·4245	1·766
December	20	+0·11037	0·11058	−0·00467		9·04450	5·3000	0·21164	3·833	0·4247	1·768

Between June 20 and August 16, the Deflecting Magnet was frequently employed for deflecting the Declination and Horizontal Force Magnets in damper experiments, and during this time it lost magnetism; this accounts for the greater time of its vibration, and the permanent change in the values of Log. $\frac{m}{X}$, Log. m X, and m.

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

METEOROLOGICAL OBSERVATIONS.

1865.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Osler's. General Direction. P.M.	Osler's. Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Jan. 1	..	29·794	37·4	28·3	31·7	24·2	59·5	22·8	..	36·7	7·5	10·6	1·5	— 5·6	NE	NE	0·0	0·0	0·0	106	0·03
2	..	29·551	34·0	22·2	28·9	24·3	39·9	19·0	..	35·7	4·6	8·3	1·4	— 8·1	Calm	S	1·4	0·0	0·0	167	0·01
3	In Equator	29·502	36·7	31·5	32·8	30·2	36·9	31·2	..	31·8	2·6	3·1	1·4	— 3·9	SW : NNE	N : SW	1·6	0·0	0·1	256	0·00
4	First Qr.	29·760	49·2	30·3	41·8	38·6	67·0	26·6	..	36·2	3·2	9·0	0·8	+ 5·4	SW	W : WSW	1·7	0·0	0·1	313	0·00
5	..	29·861	48·8	37·6	43·9	42·5	53·5	32·1	..	36·6	1·4	4·4	0·4	+ 7·7	WSW	SW	2·6	0·0	0·2	434	0·16
6	..	29·880	48·9	35·9	39·5	30·6	54·0	32·2	..	36·7	8·9	10·3	4·3	+ 3·5	WSW : WNW	WNW	21·0	0·0	1·5	360	0·03
7	..	30·149	43·8	32·4	38·2	33·9	66·8	28·6	36·9	36·6	4·3	8·4	1·1	+ 2·4	WSW	SW	0·0	0·0	0·0	338	0·00
8	..	29·686	46·2	36·8	41·7	36·3	71·2	31·2	37·9	36·7	5·4	9·2	1·3	+ 6·0	SW	SW	0·9	0·0	0·0	369	0·00
9	Greatest Declination N	29·646	47·5	38·7	43·2	38·6	76·6	34·6	37·9	37·7	4·6	8·2	0·0	+ 7·4	WSW	WSW	5·0	0·0	0·5	500	0·03
10	..	29·629	50·2	43·2	47·7	45·2	51·9	43·0	38·4	37·7	2·5	5·3	1·9	+11·8	WSW	SW	4·0	0·0	0·6	352	0·00
11	Full	29·627	47·8	40·8	44·2	42·2	61·2	35·2	38·9	38·7	2·0	5·0	0·7	+ 8·2	SW	SSW	3·0	0·0	0·1	314	0·01
12	..	28·981	47·8	39·2	43·3	40·1	54·0	36·2	40·9	39·7	3·2	5·7	0·0	+ 7·2	S	SSW	15·0	0·0	3·2	366	0·12
13	..	28·907	46·1	32·0	37·9	34·9	62·2	32·0	41·8	40·6	3·0	6·2	0·0	+ 1·7	NNW : WSW	SW : SSW	17·5	0·0	1·6	493	0·71
14	..	28·551	49·5	36·3	41·7	36·3	63·5	31·7	41·8	40·6	5·4	8·4	1·5	+ 5·4	W : SW	SW : W	29·0	0·0	6·1	581	0·29
15	..	28·945	42·6	36·6	39·7	33·3	69·6	33·0	41·9	40·7	6·4	8·1	5·5	+ 3·3	WSW	WSW	6·0	0·0	1·3	378	0·00
16	In Equator	28·839	42·5	34·0	38·0	[illegible]	65·7	29·2	41·8	39·7	4·1	6·8	0·0	+ 1·5	WSW	W	0·7	0·0	0·0	218	0·00
17	Apogee	29·040	37·5	30·6	34·0	29·6	46·0	24·0	40·9	39·5	4·4	6·2	1·3	— 2·6	WNW	W : N : WSW	0·0	0·0	0·0	163	0·00
18	..	29·184	37·5	30·0	33·9	31·2	43·2	25·0	40·9	38·7	2·7	6·0	1·3	— 2·8	WSW	SW	0·0	0·0	0·0	147	0·03
19	..	29·310	37·4	33·2	35·0	32·5	42·8	31·3	40·9	38·7	2·5	3·0	1·3	— 1·9	WSW	N	0·0	0·0	0·0	142	0·00
20	Last Qr.	29·441	37·0	29·9	33·1	27·9	40·0	25·7	40·8	38·2	5·2	7·2	2·0	— 3·9	N : W	WSW	0·0	0·0	0·0	149	0·00
21	..	29·484	29·4	19·7	24·7	22·5	30·7	13·1	40·8	37·7	2·2	4·1	1·4	—12·5	WSW	SSW	0·0	0·0	0·0	71	0·00
22	..	29·484	34·2	19·6	28·4	26·4	47·0	13·8	41·9	40·7	2·0	5·9	0·0	— 9·0	Calm	N : WSW	0·0	0·0	0·0	163	0·00
23	..	29·646	38·0	26·1	31·9	26·6	65·6	19·8	40·9	39·7	5·3	9·5	3·0	— 5·8	SW	ESE	0·0	0·0	0·0	177	0·00
24	Greatest Declination S	29·468	35·9	31·6	33·6	29·8	42·0	25·3	40·1	38·7	3·8	6·0	1·2	— 4·3	ENE	NE	0·0	0·0	0·0	180	0·04
25	..	29·508	34·2	31·8	32·7	27·4	35·9	31·2	40·9	38·7	5·3	7·3	2·6	— 5·4	NE	ENE	0·0	0·0	0·0	189	0·04
26	..	29·121	35·0	31·8	33·4	32·8	36·5	30·5	40·9	38·7	0·6	0·9	0·0	— 4·9	E	NE	0·0	0·0	0·0	219	0·20
27	New	29·006	33·6	31·9	32·4	30·3	35·4	31·4	38·9	36·7	2·1	4·0	0·6	— 6·0	NE : N	N	8·0	0·0	0·8	431	1·25
28	..	29·750	35·5	24·9	29·5	20·9	55·0	22·0	36·9	34·7	8·6	12·0	5·1	— 8·9	NNW	NW : WSW	3·0	0·0	0·4	180	0·00
29	Perigee	29·633	38·5	19·9	31·3	27·0	62·2	19·0	33·9	32·7	4·3	7·9	0·0	— 7·0	SW	S : SSE	2·0	0·0	0·1	223	0·00
30	In Equator	29·135	40·2	32·3	36·1	35·1	64·1	31·2	33·9	32·7	1·0	1·8	0·6	— 2·0	SE	SSE	2·7	0·0	0·1	159	0·17
31	..	29·013	44·5	36·3	40·3	38·5	67·8	31·0	34·9	33·7	1·8	4·2	0·0	+ 2·4	SW	S : SSE	2·2	0·0	0·1	256	0·20
Means	..	29·404	40·9	31·8	36·3	32·4	53·6	28·2	39·4	37·5	3·9	6·5	1·4	— 0·7	...	...	..	..	..	Sum 8394	Sum 3·32

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29in·860 on the 1st; the first minimum in the month was 29in·318 on the 3rd.
The second maximum ,, was 29in·956 on the 5th; the second minimum ,, was 29in·681 on the 5th.
The absolute maximum ,, was 30in·203 on the 7th; the third minimum ,, was 29in·554 on the 8th.
The fourth maximum ,, was 29in·705 on the 11th; the fourth minimum ,, was 28in·899 on the 12th.
The fifth maximum ,, was 29in·024 on the 13th; the absolute minimum ,, was 28in·393 on the 14th.
The sixth maximum ,, was 28in·967 on the 15th; the sixth minimum ,, was 28in·822 on the 16th.
The seventh maximum ,, was 29in·704 on the 23rd; the seventh minimum ,, was 28in·857 on the 27th.
The eighth maximum ,, was 29in·849 on the 28th.
The range in the month was 1in·810.
The mean for the month was 29in·404, being 0in·368 *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 50°·2 on the 10th; the lowest was 19°·6 on the 22nd.
The range ,, was 30°·6.
The mean ,, of all the highest daily readings was 40°·9, being 2°·3 *lower* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 31°·8, being 1°·7 *lower* than the average of the preceding 24 years.
The mean daily range was 9°·1, being 0°·6 *less* than the average of the preceding 24 years.
The mean for the month was 36°·3, being 1°·9 *lower* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Jan. 1			sl.-sn, h.-fr, m : 6, ci.-s	0 : 0, h.-fr
2			th.-f, h.-fr : 7, ci.-s, li.-cl, h, f	10, ci.-s : 10 : 10, sl.-sn
3			10, ci.-s	10, ci.-s : 10
4			10 : 10 : v	8, ci, ci.-cu, cu: v, ci.-s, ci : 0
5			3, ci, ci.-s	10, ci.-s, h.-r : 10, sc
6			st-w, sl.-r : 2, ci, ci.-s	8, ci, ci.-cu, ci.-s, cu.-s : 4, ci, ci.-cu
7		w : 0	h.-fr : 6, ci, ci.-s	0 : 2, ci : 8, ci, ci.-cu, ci.-s
8	0	0	5, ci, ci.-s, h	6, ci.-s, ci : 10 : 10
9	w	0	10, r : 0	2, ci : 10, ci.-s : 10
10	0	0	10, ci.-s	10, ci.-s : 10, ci.-s
11	m	w : 0	10, th.-cl	10, ci.-cu, ci.-s: 10, ci.-s, th.-r : 10
12	0	ss, N P sp. g-cur: 0	10 : 10, w : 10, r, st.-w	10, hl, h.-r, w : vv, th.-r, ci.-cu, cu.-s: 10, v, oc.-shs
13	0	0	10, h.-r : 10, sn : 0	10, ci.-s, ci : 10, h.-sqs : 0, st.-w
14			h.-r, st.-w : 10, ci.-s, cu.-s, h.-sqs	10, oc.-r : v, w : 5, cu.-s, ci.-s
15			9, ci.-s, ci	v, ci, ci. cu : vv, m
16			h.-fr : 8, ci.-s, ci	10, ci.-s, cu.-s : 10, sl.-r
17			h.-fr : 0 : 10, ci.-s	10, ci.-s : 10, sn
18			sl.-sn : 4, ci, ci.-s, h	10, ci.-s : 8, ci, ci.-s : 10, sl.-f
19			10, gt.-glm	10 : 10 : 0
20			10, ci.-s	10, ci.-s : 7, ci, ci.-s, h : 0, h.-fr
21			0, h.-fr, f, h	10, ci.-s, h, sl-f : 0, th.-f, h.-fr
22			h.-fr : 10, sl.-f	10, ci, ci.-s : 0, h.-fr, sl.-f
23			h.-fr : 0, h	0, h : 3, ci : 10, ci.-s, h.-fr
24			10, sl.-sn : 10	10 : 10, sl.-sn
25			sn : 10, ci.-s	10, ci.-s : 10, ci.-s
26			10, sn : 10, r	10, sl.-f : 10, ci.-s, r : 10, c.-r
27			c-r : 10, sl : 10, sn	10, sn : sl : 10
28			1, th.-cl, h	2, li.-cl : 2, li.-cl, h : 0
29			0 : 0, h	10 : 10
30			sn : 10, th.-r	9, ci.-s : 10, sl.-r, sl.-f
31			4, ci	10, ci.-s : 10, r : 10, ci.-s, c.-r

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was $46^{\circ}\cdot4$ on the 10th; and the lowest was $13^{\circ}\cdot5$ on the 28th.

The mean ,, was $32^{\circ}\cdot4$, being $2^{\circ}\cdot7$ *lower* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot184$, being $0^{\text{in}}\cdot019$ *less* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{\text{grs}}\cdot1$, being $0^{\text{gr}}\cdot3$ *less* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 86 (that of Saturation being represented by 100), being 2 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 550 grains, being 4 grains *less* than the average of the preceding years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·2.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·7.

WIND.

The proportions were of N. 5, S. 8, W. 13, E. 3, and Calm 2. The greatest pressure in the month was $29^{\text{lbs}}\cdot0$ on the square foot, on the 14th.

RAIN.

Fell on 16 days in the month, amounting to $3^{\text{in}}\cdot32$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{\text{in}}\cdot60$ *greater* than the average fall of the preceding 50 years.

ELECTRICITY.—January 1 to 6 and 14 to 31, the Electrical Apparatus was not in action.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry.			Dew Point.	[illegible]	Lowest on the Grass as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames at Greenwich, by Self-Registering Thermometers, read at 9h A.M.		Difference between the Dew Point Temperature and Air Temperature			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction.		Pressure in lbs. on the square foot.			Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.		
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
Feb. 1	..	28·788	49·3	38·9	43·9	41·3	70·3	35·2	36·9	34·7	2·6	6·3	0·0	+ 6·1	SW	SW	1·2	0·0	0·0	315	0·03
2	..	28·967	52·1	42·6	46·8	42·3	69·2	40·0	37·9	35·7	4·5	7·6	2·0	+ 9·1	SW	SW	2·8	0·0	0·3	228	0·02
3	First Qr.	29·051	47·0	38·5	42·7	40·8	73·0	35·6	38·6	36·9	1·9	3·3	0·0	+ 4·9	SSW : S	S : SE	0·0	0·0	0·0	111	0·00
4	..	29·423	40·6	31·4	33·7	32·2	40·6	31·0	38·4	36·9	1·5	3·9	0·3	− 4·3	E : ENE	ENE	0·0	0·0	0·0	222	0·01
5	Greatest Decl. N	29·636	38·0	31·2	34·5	31·9	40·5	31·0	39·9	37·7	2·6	3·4	2·4	− 3·8	ENE	E : SE	0·0	0·0	0·0	112	0·01
6	..	29·801	40·7	34·3	37·7	36·3	48·7	..	40·9	38·7	1·4	2·3	0·5	− 0·9	SE : SW	SW : SSE	0·0	0·0	0·0	220	0·12
7	..	29·670	50·2	39·6	45·1	44·0	55·6	38·0	41·1	38·8	1·1	4·8	0·4	+ 6·3	S : SW	SW	2·4	0·0	0·1	281	0·08
8	..	29·801	46·0	34·1	36·6	28·1	46·2	34·0	40·9	38·7	8·5	10·0	3·0	− 2·3	W : N	NNE	2·7	0·0	0·4	329	0·09
9	..	30·185	40·0	30·2	34·2	24·7	89·6	24·5	39·4	38·2	9·5	12·2	4·1	− 4·7	NNE	NE	4·0	0·0	0·5	297	0·00
10	Full	30·403	37·8	29·4	32·5	24·7	84·7	23·2	38·9	37·7	7·8	13·0	3·8	− 6·3	NE	NE : N	2·0	0·0	0·1	188	0·00
11	..	30·376	30·2	24·7	26·8	19·9	69·9	22·8	38·6	36·7	6·9	9·5	4·3	− 11·8	N : SE	E : NNE	0·0	0·0	0·0	166	0·08
12	..	30·102	34·8	26·9	30·1	23·6	67·2	24·0	37·9	36·7	6·5	8·9	2·1	− 8·3	NNE	NE	2·7	0·0	0·2	256	0·00
13	In Equator: Apogee	30·060	28·5	24·1	26·0	21·3	64·0	24·1	37·1	34·9	4·7	6·9	1·6	− 12·3	ENE : SE	E : NE	1·5	0·0	0·1	207	0·09
14	..	30·046	31·5	26·5	28·2	22·1	41·2	26·1	35·9	33·7	6·1	10·2	3·5	− 10·0	NE	E : Calm	1·7	0·0	0·0	136	0·0
15	..	29·755	32·8	15·5	24·0	19·7	82·6	15·3	34·9	33·2	4·3	10·9	0·0	− 14·1	Calm	SSE : SW	0·0	0·0	0·0	130	0·00
16	..	29·189	39·2	26·4	32·3	30·1	45·9	26·4	36·1	33·9	2·2	5·4	0·2	− 5·8	SW	SE : SSW	0·0	0·0	0·0	249	0·16
17	..	29·226	40·5	28·8	33·7	28·1	84·1	28·0	36·9	34·7	5·6	8·9	0·5	− 4·5	NW : WNW	SW : WSW	5·0	0·0	0·5	417	0·24
18	Last Qr.	29·471	45·1	31·5	38·9	34·6	84·0	26·0	37·1	34·9	4·3	9·0	2·1	+ 0·6	W : WSW	SW	10·0	0·0	0·7	548	0·03
19	..	29·196	46·1	32·4	37·1	26·6	87·0	29·8	36·4	34·7	10·5	11·4	8·0	− 1·4	SW : WSW	WSW : NW	26·0	0·5	6·4	610	0·06
20	Greatest Declination S	29·961	36·6	28·5	32·3	18·6	77·2	24·9	36·3	34·7	13·7	15·1	10·3	− 6·4	NW : W	NNW	12·5	0·0	3·4	435	0·01
21	..	30·171	35·2	29·4	32·0	26·8	43·5	24·6	36·2	34·3	5·2	11·3	0·6	− 6·8	NW : W	SW : S	1·6	0·0	0·1	114	0·08
22	..	30·124	43·0	32·5	38·1	37·3	54·5	30·2	36·0	35·3	0·8	2·9	0·0	− 0·9	Calm : WSW	SW : WSW	0·0	0·0	0·0	188	0·01
23	..	30·134	51·3	40·1	45·6	43·5	63·6	36·9	36·5	35·9	2·1	4·6	0·0	+ 6·4	WSW	SW	1·2	0·0	0·1	377	0·03
24	..	29·540	46·6	39·1	42·1	38·4	48·6	39·0	38·1	36·7	3·7	7·1	0·0	+ 2·7	SW	N : NW	6·0	0·0	1·1	317	0·46
25	New	30·035	49·6	33·2	41·0	34·9	92·0	33·0	39·4	38·7	6·1	12·4	0·0	+ 1·4	NW : N	N : SW	0·0	0·0	0·0	226	0·00
26	Perigee: In Equator.	29·746	45·5	35·7	40·6	39·9	47·2	35·2	38·9	38·2	0·7	2·4	0·0	+ 0·8	SSW	SW	2·4	0·0	0·2	294	0·14
27	..	29·959	50·4	35·7	42·4	35·8	87·6	30·6	41·9	39·7	6·6	13·0	0·0	+ 2·5	N	SSW	0·0	0·0	0·0	296	0·00
28	..	29·388	52·7	39·7	45·8	39·2	93·6	39·7	43·9	42·7	6·6	11·5	2·6	+ 5·7	SW	W : WSW	3·7	0·0	0·7	439	0·00
Means	..	29·722	42·2	32·2	36·6	31·7	67·2	30·0	38·2	36·6	4·9	8·1	1·9	− 2·1	...	...	..	..	..	Sum 7708	Sum 1·75

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The absolute minimum in the month was $28^{\text{in}}\cdot 728$ on the 1st.

The first maximum in the month was $29^{\text{in}}\cdot 827$ on the 6th; the second minimum ,, was $29^{\text{in}}\cdot 666$ on the 7th.
The absolute maximum ,, was $30^{\text{in}}\cdot 432$ on the 10th; the third minimum ,, was $28^{\text{in}}\cdot 978$ on the 16th.
The third maximum ,, was $29^{\text{in}}\cdot 533$ on the 18th; the fourth minimum ,, was $29^{\text{in}}\cdot 034$ on the 19th.
The fourth maximum ,, was $30^{\text{in}}\cdot 266$ on the 21st; the fifth minimum ,, was $30^{\text{in}}\cdot 050$ on the 21st.
The fifth maximum ,, was $30^{\text{in}}\cdot 177$ on the 23rd; the sixth minimum ,, was $29^{\text{in}}\cdot 453$ on the 24th.
The sixth maximum ,, was $30^{\text{in}}\cdot 078$ on the 25th; the seventh minimum ,, was $29^{\text{in}}\cdot 717$ on the 26th.
The seventh maximum ,, was $30^{\text{in}}\cdot 029$ on the 27th; the eighth minimum ,, was $29^{\text{in}}\cdot 360$ on the 28th.
The range in the month was $1^{\text{in}}\cdot 704$.
The mean for the month was $29^{\text{in}}\cdot 722$, being $0^{\text{in}}\cdot 080$ *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 52°·7 on the 28th; the lowest was 15°·5 on the 15th.
The range ,, was 37°·2.
The mean ,, of all the highest daily readings was 42°·2, being 2°·7 *lower* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 32°·2, being 1°·3 *lower* than the average of the preceding 24 years.
The mean daily range was 10°·0, being 1°·4 *less* than the average of the preceding 24 years.
The mean for the month was 36°·6, being 2°·1 *lower* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Feb. 1			9, li.-cl	10, li.-cl, ci.-s, h : sl.-r, v : 10, fr.-shs
2			9, ci, ci.-cu, ci.-s, cu.-s	7, ci, ci.-cu, ci.-s, th.-r : 10, th.-r
3			10 : 10, ci.-s	9, cu, cu.-s, ci.-s, ci, sl.-r : 10
4			10, ci.-s	10, ci.-s : th.-r, fr.-r, sl : 10, sl
5			10 : 10	10 : 10, r
6			c.-r : 10, f	10 : 10
7			10, sl.-r	10, c.-r : 10, fr.-shs
8			10 : 10, fr.-r : 10	10 : 10, ci.-s
9			4, ci, ci.-cu	7, ci, ci.-cu, v : ci, ci.-cu : 3, th.-cl, vv
10			10 : 10, sl.-sn	10, ci, ci.-cu, cu : 10, ci.-s, cu.-s, vv, m : 0
11			10, sn	9, cu-s, ci.-cu, sn : 10 : 10
12			10, ci.-cu	6, ci, ci.-cu, v : 10, cu.-s : 10, sl
13			10, sn : 10, sl	8, ci, ci.-cu : 10, sl : 10, sl
14			10 : 10	10 : 8, v
15			h.-fr : 0, h	0, h : 0 : 10
16	w	w : vv, sN, g-cur, sp, wP	10 : 10	10, sn : 10, oc.-sn, th.-r : h.-r, h.-shs
17	w	0	10, c.-r, sn : 10, sn : 0	0 : 10, oc.-r : 0, a, m
18	0	sN, g-cur, sps : 0	0 : 0	10, ci, ci.-cu, ci.-s, r, v : 10, oc.-shs
19			10, r, st.-w : vv, st.-w, ci, ci.-cu	10, ci.-s, st.-w : 10, fr.-sqs, r, sn : 0, st.-w
20			10, sn : 0, h	0, w, ci : 0
21			10	10, sn : 10, th.-r : 10
22			10 : 10	10 : 10 : 7, h, f
23			10, r : 4, h, v	10, ci.-s, ci : 10, ci.-s
24			10 : 10, r	10, c.-r : 10, v : 0
25		0 : w	0 : 0, v	6, ci, ci.-cu, cu : 10, ci.-cu, cu.-s : 10
26	0	0	10 : 10 : 10, r	10, c.-r : 10 : 10
27	w : 0	w : 0	2, ci, li.-cl	8, ci, h : 10, cu.-s, ci.-s : 10, ci.-s
28	w	w : 0	10 : 10 : 10, r, sc	8, ci.-s, cu.-s, ci, v, sl.-r : 0

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 47°·0 on the 23rd; and the lowest was 17°·0 on the 20th.

The mean ,, was 31°·7, being 3°·0 *lower* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot179$, being $0^{\text{in}}\cdot024$ *less* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{\text{grs}}\cdot1$, being $0^{\text{gr}}\cdot3$ *less* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 83 (that of Saturation being represented by 100), being 2 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 555 grains, being 1 grain *greater* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·8.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 1·3.

WIND.

The proportions were of N. 6, S. 7, W. 8, E. 4, and Calm 3. The greatest pressure in the month was $26^{\text{lbs}}\cdot0$ on the square foot on the 19th.

RAIN.

Fell on 19 days in the month, amounting to $1^{\text{in}}\cdot75$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{\text{in}}\cdot23$ *greater* than the average fall of the preceding 50 years.

ELECTRICITY.—February 1 to 15, and 19 to 24. The Electrical apparatus was not in action.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	WIND AS DEDUCED FROM ANEMOMETERS.						Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M.						OSLER'S.					ROBINSON'S.	
															General Direction.		Pressure in lbs. on the square foot.			Amount of Horizontal Movement of the Air on each Day.	
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.		
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
Mar. 1	..	29·498	50·0	39·3	43·9	38·0	59·2	39·2	43·9	41·7	5·9	11·0	2·3	+ 3·7	W : WNW	WNW : W	4·4	0·0	0·8	309	0·02
2	..	29·627	49·3	37·4	42·3	37·3	63·7	32·2	44·4	41·7	5·0	9·7	1·1	+ 2·1	WSW	NW	10·0	0·0	1·7	423	0·16
3	..	30·132	48·5	32·6	39·7	32·2	84·3	28·4	43·1	40·9	7·5	13·0	0·0	− 0·5	NW : W	WNW	1·8	0·0	0·1	229	0·00
4	First Qr.	29·884	46·9	30·9	39·7	35·1	61·4	27·0	42·9	40·7	4·6	9·0	0·0	− 0·4	SW : SSW	SW	8·0	0·0	1·0	441	0·00
5	Greatest Declination N.	29·367	46·6	32·3	39·1	32·9	85·3	28·1	43·7	42·5	6·2	12·0	0·0	− 1·0	WSW	WSW : SW	3·0	0·0	0·3	279	0·16
6	..	29·113	40·1	33·7	36·6	34·8	51·2	30·2	43·5	42·1	1·8	4·8	0·6	− 3·5	SSW : S	N	2·0	0·0	0·1	296	0·17
7	..	29·446	42·5	33·1	36·9	31·0	61·4	30·0	42·6	41·2	5·9	11·2	0·6	− 3·3	NNW	NW	0·8	0·0	0·0	189	0·00
8	..	29·540	43·0	30·2	35·9	30·7	78·0	29·0	43·4	42·1	5·2	11·4	0·0	− 4·4	NNW	N	2·5	0·0	0·2	415	0·02
9	..	29·783	43·2	34·2	37·6	30·0	69·2	31·0	43·5	42·7	7·6	10·1	3·4	− 2·8	N	N	3·0	0·0	0·6	303	0·00
10	..	29·628	42·5	30·8	36·2	31·3	69·0	28·4	42·9	41·2	4·9	9·0	0·0	− 4·4	N : SW	WSW : NW	1·5	0·0	0·1	387	0·00
11	..	29·596	43·7	36·0	38·5	34·1	60·0	34·1	41·8	39·5	4·4	8·6	0·0	− 2·4	NW : NNE	NNE	3·0	0·0	0·3	302	0·10
12	Full In Equator.	29·906	41·9	33·4	36·9	31·5	65·2	32·0	39·9	39·2	5·4	9·5	0·3	− 4·3	NNE	N	0·0	0·0	0·0	115	0·00
13	Apogee	29·698	42·5	34·7	37·3	31·9	86·7	33·2	40·1	39·1	5·4	8·6	0·0	− 4·1	Calm : N	SE	0·0	0·0	0·0	149	0·00
14	..	29·735	42·6	33·7	36·3	30·7	69·4	32·2	40·1	39·1	5·6	10·6	0·0	− 5·2	NE	NE : NNE	2·5	0·0	0·3	324	0·00
15	..	29·880	39·1	32·4	35·2	28·4	48·0	31·3	40·0	38·9	6·8	9·5	1·6	− 6·5	NNE	NNE	1·3	0·0	0·0	146	0·00
16	..	29·872	44·6	32·6	36·4	28·0	108·0	26·5	40·1	39·2	8·4	13·6	2·5	− 5·5	N	NNE : Calm	0·0	0·0	0·0	103	0·00
17	..	29·784	44·8	33·0	37·3	32·0	67·0	29·4	40·2	39·5	5·3	11·2	3·0	− 4·7	ESE	ESE	0·0	0·0	0·0	186	0·00
18	..	29·838	40·7	29·5	34·6	31·0	69·8	26·3	40·3	39·2	3·6	8·5	0·0	− 7·5	ESE	ESE	2·2	0·0	0·3	253	0·00
19	Greatest Declination S.	29·669	39·7	31·9	35·1	30·1	80·5	..	39·4	38·7	5·0	7·8	0·3	− 7·1	ESE	E	17·0	0·2	3·0	573	0·00
20	Last Qr.	29·791	34·0	26·5	30·2	18·0	95·4	23·8	39·0	38·2	12·2	14·1	9·8	−12·0	E by N	E by N	15·6	0·0	3·7	428	0·00
21	..	29·843	40·2	23·7	31·6	21·3	104·0	21·6	38·9	37·9	10·3	13·9	3·5	−10·7	E : ENE	ENE : NE	0·0	0·0	0·0	346	0·00
22	..	29·779	45·8	28·5	35·5	26·8	98·6	25·0	38·8	37·2	8·7	16·5	1·0	− 6·7	NNE	NNE : N	5·0	0·0	0·2	202	0·00
23	..	29·677	45·8	30·9	35·9	28·9	84·2	26·8	38·6	36·7	7·0	14·1	1·7	− 6·3	NW : N	N	0·0	0·0	0·0	218	0·00
24	..	29·659	45·3	27·3	34·2	27·4	90·2	20·5	38·3	36·8	6·8	16·9	0·0	− 8·0	NW : N	N	2·7	0·0	0·0	214	0·00
25	..	29·499	44·3	25·1	35·7	32·8	87·8	20·6	38·4	37·3	2·9	11·9	0·0	− 6·6	NNW : WSW	SW : W	1·8	0·0	0·2	389	0·17
26	In Equator.	29·298	41·8	31·3	34·3	30·1	66·5	28·2	37·6	36·9	4·2	10·1	1·8	− 8·2	NW : N	NNE : N	14·5	0·0	0·9	441	0·01
27	Perigee, New.	29·902	44·6	27·3	32·9	27·2	102·8	24·5	37·3	37·0	5·7	11·3	1·3	−10·0	N	N	1·0	0·0	0·0	161	0·01
28	..	29·912	43·8	26·4	35·0	28·3	96·4	22·2	37·9	37·7	6·7	13·9	0·0	− 8·2	Calm : S	Calm : SSW	0·6	0·0	0·0	139	0·00
29	..	29·904	38·6	29·6	33·1	27·2	53·2	29·3	38·3	37·9	5·9	8·3	0·0	−10·5	SSE : S	Calm	0·0	0·0	0·0	104	0·03
30	..	30·106	49·0	26·8	36·0	28·4	105·6	22·4	38·4	37·9	7·6	13·9	0·0	− 8·0	Calm : SE	N : Calm	0·0	0·0	0·0	92	0·00
31	..	30·007	58·7	28·6	44·3	37·9	117·2	25·0	39·0	38·7	6·4	17·5	0·0	− 0·1	SW	W : SW	0·0	0·0	0·0	202	0·00
Means	..	29·722	44·0	31·1	36·6	30·5	78·5	27·9	40·5	39·3	6·1	11·3	1·1	− 5·1	...	...	..	..	..	Sum 8358	Sum 0·85

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The absolute maximum in the month was 30^{in}·184 on the 3rd; the absolute minimum in the month was 29^{in}·052 on the 6th.

The second maximum ,, was 29^{in}·845 on the 9th; the second minimum ,, was 29^{in}·400 on the 11th.

The third maximum ,, was 29^{in}·927 on the 12th; the third minimum ,, was 29^{in}·596 on the 13th.

The fourth maximum ,, was 29^{in}·907 on the 16th; the fourth minimum ,, was 29^{in}·649 on the 19th.

The fifth maximum ,, was 29^{in}·889 on the 21st; the fifth minimum ,, was 29^{in}·155 on the 26th.

The sixth maximum ,, was 30^{in}·125 on the 30th.

The range in the month was 1^{in}·132.

The mean for the month was 29^{in}·722, being 0^{in}·036 *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 58°·7 on the 31st; the lowest was 23°·7 on the 21st.

The range ,, was 35°·0.

The mean ,, of all the highest daily readings was 44°·0, being 6°·2 *lower* than the average of the preceding 24 years.

The mean ,, of all the lowest daily readings was 31°·1, being 4° 3 *lower* than the average of the preceding 24 years.

The mean daily range was 12°·9, being 1°·8 *less* than the average of the preceding 24 years.

The mean for the month was 36°·6, being 5°·4 *lower* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
March 1	0	0	10, r	10, oc.-r : 10, oc.-r
2	0	0	10 : 10, th.-r	10, th.-r : vv : 0
3	0	0	10, th-cl, v	10, ci, ci.-cu, cu.-s : 8, th.-cl : 0, h
4			10, th-cl	10, ci.-s, v : v, sl.-r
5			10, r : 2, ci, ci.-cu	10, cu.-s, ci.-cu : 10, th.-cl : 0
6		mN : sN,sp,g-cur.	10, r : 10, glm	10, r : 10, sl.-r : 10, [illegible]
7	w	w	10 : 10	10, ci.-s : 10
8	w	wN	10, ci.-s : 10, ci.-s : 10, sl	9, sl.-r : sn, sl.-r, v : 10
9	0	wN : 0	6, ci, ci.-cu, sl.-sn, v	10 : 10, sl, th.-r
10	0	0	8, th-cl, h	10, sl.-sn : 10, oc.-r : 10
11	0	0	10 : 10, ci.-s	10, ci.-s : 10, [illegible]
12	0	w	10, ci.-s	10, ci.-s : 10
13	0	0	10 : 10, ci.-s	10, gt.-glm : 10, ci.-s
14	0	0	10 : 10 : 10, sl.-sn, vv	10, sl.-sn : 10
15	0	0	10, ci.-s : 10, ci.-s	10, ci.-s : 10
16	0	w	10 : 10, th.-cl	6, ci, ci.-cu, ci.-s : 0 : 10, th.-cl
17	0 : 0	w : m	10 : 10	10, ci.-cu, ci.-s : 10, sl : vv
18	w : 0	w : 0	10 : 10 : 10, sl.-f	10, ci.-s, cu.-s : 10
19	0	0	8, ci, ci.-cu, cu.-s, ci.-s, w	10, st.-w : 10
20	w : 0	w : 0	0	2, ci, ci.-cu : v, ci.-s, cu.-s : 0, a
21	0	w	4, ci, ci.-cu	0 : 1, li.-cl : 10
22	0	sNP,sps,g-cur,vv : w	5, ci, ci.-cu	9, ci, ci.-cu, cu.-s, ci.-s, sl, sl.-sn : 0
23	0	w : wN : 0	10, sl.-sn	10, v : 1,
24	w	sNP,sps,g-cur,vv : w	0, h.-fr : 5, li.-cl	6, ci.-cu, oc.-sn : 0
25	0 : w	ss,sp,g-cur : 0	0, h.-fr : 0, li.-cl	10, th.-cl, r : 10, ci.-s, r : 10, c.-r
26	0	0 : w	10 : 10 : 10, sl, sl.-r	10, v, hl : vv, shs.-r, hl
27	w	v,sps,g-cur : m	10, oc.-sn : 2, ci, ci.-cu	6, ci, ci.-cu : 5, oc.-sn : 0, f
28	w	w : 0	1, ci	8, ci.-s, ci.-cu : 10, ci.-s, cu.-s, sn : 10
29	w	w	10, sl.-sn : 10, oc.-sn	10, oc.-sn : 10 : 10
30	w	0 : w	10 : 10, th.-cl, h, gt.-glm	6, ci, ci.-cu 0
31	w	w	0 : 0, ci.	8, ci, ci.-s 10, ci.-s

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 44°·6 on the 2nd; and the lowest was 16°·6 on the 20th.

The mean ,, was 30°·5, being 6°·2 *lower* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot170$, being $0^{\text{in}}\cdot049$ *less* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{\text{gr}}\cdot0$, being $0^{\text{gr}}\cdot5$ *less* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 79 (that of Saturation being represented by 100), being 3 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 555 grains, being 5 grains *greater* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·7.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·4.

WIND.

The proportions were of N. 13, S. 3, W. 7, E. 5, and Calm 3. The greatest pressure in the month was $17^{\text{lbs}}\cdot0$ on the square foot on the 19th.

RAIN.

Fell on 10 days in the month, amounting to $0^{\text{in}}\cdot85$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{\text{in}}\cdot76$ *less* than the average fall of the preceding 50 years.

ELECTRICITY.—The insulating lamp was not burning on March 4 and 5.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers.						Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames at Greenwich, by Self-Registering Thermometers, read at 9h A.M.						Osler's.					Robinson's	
															General Direction.		Pressure in lbs. on the square foot.			Amount of Horizontal Movement of the Air on each Day.	
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 21 Obs.		
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
April 1	Greatest Declination N	29·904	55·2	43·9	47·6	39·7	115·9	38·0	40·0	39·7	7·9	13·9	0·0	+ 3·0	SW : NW	NW	0·0	0·0	0·0	150	0·04
2	. .	29·812	57·2	31·9	43·2	36·4	96·1	26·8	40·0	39·8	6·8	16·0	0·0	— 1·6	Calm	SSW : SSE	1·0	0·0	0·0	185	0·00
3	First Quarter	29·750	55·1	37·5	44·0	38·2	85·2	32·2	41·0	40·7	5·8	14·6	0·0	— 1·0	SE	E	1·4	0·0	0·1	150	0·00
4	. .	30·055	59·0	35·8	44·8	37·5	105·3	35·2	41·9	41·6	7·3	19·4	0·0	— 0·4	E	SW	0·0	0·0	0·0	245	0·00
5	. .	30·111	57·6	44·8	50·8	47·0	73·0	41·2	43·9	42·7	3·8	9·8	2·4	+ 5·4	WSW	W	0·0	0·0	0·0	289	0·08
6	. .	30·116	64·3	45·7	52·2	44·4	111·2	41·6	45·9	44·7	7·8	18·1	0·2	+ 6·8	WSW	WSW	1·5	0·0	0·2	317	0·00
7	. .	30·036	63·0	44·9	52·8	47·1	98·9	42·0	47·6	46·9	5·7	12·7	0·4	+ 7·4	WSW	WSW	0·0	0·0	0·0	141	0·00
8	In Equator	29·966	71·5	41·1	54·7	46·6	118·2	32·3	48·9	48·7	8·1	23·2	0·0	+ 9·3	SW	SW : Calm	0·0	0·0	0·0	62	0·00
9	Apogee	30·085	72·0	39·4	56·4	42·6	119·4	33·2	50·9	49·7	13·8	29·5	0·0	+11·1	Calm	SE : SSW	0·0	0·0	0·0	109	0·00
10	. .	30·100	71·7	45·6	56·9	44·6	110·0	35·9	51·9	51·7	12·3	23·0	4·4	+11·7	SW : W	N : E	0·0	0·0	0·0	104	0·00
11	Full	30·060	70·0	37·4	52·1	43·0	122·4	31·9	52·9	51·7	9·1	22·0	0·0	+ 7·0	Calm	Variable	0·0	0·0	0·0	82	0·00
12	. .	29·882	63·5	39·0	50·5	39·4	110·0	33·0	53·9	53·2	11·1	21·9	0·0	+ 5·5	SE	ESE	1·4	0·0	0·1	126	0·00
13	. .	29·790	70·0	40·2	53·8	45·0	120·2	34·4	53·9	53·2	8·8	20·3	0·0	+ 8·9	Calm	SW	0·6	0·0	0·0	173	0·01
14	. .	29·805	57·0	44·8	50·1	46·2	75·0	41·8	54·6	53·7	3·9	6·6	0·7	+ 5·1	SW	Calm : N	0·0	0·0	0·0	133	0·12
15	. .	30·004	53·2	44·2	46·8	43·5	72·9	44·2	54·2	53·4	3·3	5·8	0·4	+ 1·5	N	NE	0·0	0·0	0·0	129	0·02
16	Greatest Declination S	29·995	65·3	39·2	52·1	46·6	110·2	. .	56·0	54·9	5·5	13·7	0·0	+ 6·6	Calm	E	2·7	0·0	0·3	197	0·00
17	. .	29·777	72·6	48·6	59·9	51·6	93·4	46·3	56·0	55·7	8·3	20·9	1·0	+14·2	Calm	S	0·0	0·0	0·0	137	0·11
18	Last Quarter	29·782	69·7	53·0	57·9	51·5	113·4	51·1	55·9	54·7	6·4	14·2	0·8	+11·9	S : SW	SSW : S	0·0	0·0	0·0	152	0·02
19	. .	29·999	67·8	47·7	53·3	49·2	102·6	43·4	56·9	55·7	4·1	12·2	0·0	+ 6·9	Calm : N	N : NE	1·0	0·0	0·1	223	0·00
20	. .	30·024	68·2	43·6	52·3	46·5	114·4	43·1	57·1	56·0	5·8	15·8	0·2	+ 5·6	NNE	NNE	1·0	0·0	0·1	212	0·00
21	. .	29·960	74·5	43·4	57·5	48·9	122·6	41·0	57·9	56·7	8·6	20·1	0·4	+10·5	NNE	NE : E	0·4	0·0	0·0	164	0·00
22	In Equator	29·973	76·7	43·4	58·8	44·6	123·0	36·4	57·9	56·7	14·2	29·3	0·0	+11·6	NE	ESE	1·0	0·0	0·1	181	0·00
23	. .	30·047	75·8	41·0	56·4	47·3	127·0	38·0	58·6	58·4	9·1	24·0	0·0	+ 9·0	N	NE : ESE	0·0	0·0	0·0	160	0·00
24	Perigee	30·086	72·4	38·2	53·3	44·6	126·0	32·4	58·9	57·7	8·7	23·0	0·0	+ 5·7	NNE	NE : ESE	0·0	0·0	0·0	141	0·00
25	New	30·037	70·1	36·1	50·5	44·2	125·0	30·3	59·4	58·2	6·3	23·4	0·0	+ 2·8	Calm	NNE	0·0	0·0	0·0	82	0·00
26	. .	29·972	76·2	36·8	57·0	45·1	115·7	30·2	58·9	57·7	11·9	27·4	0·0	+ 9·1	Calm : SW	NNW : Calm	0·0	0·0	0·0	105	0·00
27	. .	29·912	81·5	42·4	61·5	45·6	133·4	36·6	58·9	57·7	15·9	30·8	0·0	+13·4	SW	Variable	0·0	0·0	0·0	120	0·00
28	Greatest Declination N	29·820	71·7	44·3	55·8	46·4	131·7	40·0	58·9	57·7	9·4	21·8	0·0	+ 7·4	Calm	E : ENE	1·5	0·0	0·1	290	0·00
29	. .	29·886	54·3	38·0	44·6	34·2	106·0	33·8	58·6	57·2	10·4	17·4	3·5	— 4·2	ENE : ESE	ESE : ENE	2·2	0·0	0·3	312	0·00
30	. .	29·855	52·4	34·0	42·4	33·5	113·2	28·6	58·8	57·0	8·9	17·4	1·1	— 6·9	NE : E	E	2·7	0·0	0·4	193	0·00
Means	. .	29·954	66·3	41·5	52·3	44·0	109·7	37·1	53·0	52·1	8·3	18·9	0.5	+ 6·1	. . .	. . .	. .	. .	. .	Sum 5064	Sum 0·40

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The absolute maximum in the month was 30in·169 on the 6th; the absolute minimum in the month was 29in·699 on the 3rd.
The second maximum ,, was 30in·137 on the 10th; the second minimum ,, was 29in·944 on the 8th.
The third maximum ,, was 30in·050 on the 15th; the third minimum ,, was 29in·775 on the 13th.
The fourth maximum ,, was 30in·053 on the 20th; the fourth minimum ,, was 29in·752 on the 18th.
The fifth maximum ,, was 30in·118 on the 24th; the fifth minimum ,, was 29in·936 on the 21st.
The sixth maximum ,, was 29in·931 on the 29th; the sixth minimum ,, was 29in·791 on the 28th.
The range in the month was 0in·470.
The mean for the month was 29in·954, being 0in·193 *higher* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 81°·5 on the 27th; the lowest was 31°·9 on the 2nd.
The range ,, was 49°·6.
The mean ,, of all the highest daily readings was 66°·3, being 9°·3 *higher* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 41°·5, being 2°·7 *higher* than the average of the preceding 24 years.
The mean daily range was 24°·8, being 6°·6 *greater* than the average of the preceding 24 years.
The mean for the month was 52°·3, being 5°·7 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY. A.M.	ELECTRICITY. P.M.	CLOUDS AND WEATHER. A.M.	CLOUDS AND WEATHER. P.M.
April 1	0	wN, mP : wN : w	10, r : 10, ci, ci.-cu, sl. r	5, ci, ci.-cu : 5, sl.-r, li.-cl
2	w	w	4, ci, ci.-cu	9, ci.-s, ci.-cu, cu.-s : 0
3	w	w	0 : 0, v	8, ci.-cu, ci, v : 10, ci.-s
4	w	w	10 : 10, v	2, ci, li.-cl : 10, th.-cl, lu.-ha
5	w	0 : w	10 : 10	10, oc.-shs : 10, ci.-s, oc.-r : 10
6	w : 0	0	10 : 10, li.-cl	7, ci, ci.-cu : v, ci, th.-cl
7	w	0 : w	7, li.-cl, ci.-s	10, ci.-s, ci.-cu, th.-cl : 10, th.-cl
8	w	w	8, ci	0 : 1, ci, ci.-cu : 0, m
9	0	w	0 : 0	0, ci : 0
10	w : 0	w	0 : 0	0, li.-cl : 0
11	w	0 : w	0 : 0	0 : 0
12	w : 0	w : m	0 : 0	0 : 2, ci : 2, ci, ci.-s
13	m : 0	w : m	1, ci, h	3, ci : 7, ci, ci.-cu, v : 0, h
14	w	sN : w	10, th.-cl, h	10, ci.-s, r : 10, fr.-h.-shs : 10, ci.-s
15	w	w : m	10, sl.-r : 10	10, ci.-s : 10, ci.-s, cu.-s : 3, v
16	w	w	1, ci, ci.-cu	0, v : 10
17	w	w	10, h.-r : 8, ci, ci.-cu, ci.-s	10, sl.-r : 10, th.-r
18	w	w : m	10 : 10	10, ci, ci.-cu : 10, fr.-shs
19	w	w	10 : 10	10, ci.-cu, v : 10
20	w	w	10 : 10, v	0 : 0, ha
21	w	w	1, li.-cl	1, ci, ci.-cu : 0
22	w	w	0 : 0	0 : 0
23	w	w	0 : 0	0 : 0
24	w	w	0 : 0	0 : 0
25	w	w : m	1, li.-cl, h	0 : 0
26	w	wN : w	0 : 0, h	7, th.-cl : 0
27	w	w	7, li.-cl, h	0, h : 1, ci
28	w	w : 0	8, ci	1, ci : 0, v : 10
29	0	wN : w	7, ci-cu, ci	5, ci, ci.-cu : 0 : 0
30	w	w	2, li.-cl	0 : 0

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 55°·8 on the 17th; and the lowest was 31°·8 on the 30th.

The mean ,, was 44°·0, being 3°·8 *higher* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot288$, being $0^{\text{in}}\cdot039$ *greater* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $3^{\text{grs}}\cdot3$, being $0^{\text{gr}}\cdot4$ *greater* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 73 (that of Saturation being represented by 100), being 6 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 542 grains, being 1 grain *less* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 4·2.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·9.

WIND.

The proportions were of N. 6, S. 5, W. 5, E. 7, and Calm 7. The greatest pressure in the month was $2^{\text{lbs}}\cdot7$ on the square foot on the 16th and 30th.

RAIN.

Fell on 7 days in the month, amounting to $0^{\text{in}}\cdot40$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{\text{in}}\cdot34$ *less* than the average fall of the preceding 50 years.

RESULTS OF DAILY METEOROLOGICAL OBSERVATIONS

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
May 1	..	29·806	62·0	31·4	46·9	39·2	87·8	20·3	58·6	56·8	7·7	19·0	0·0	− 2·9	Calm : SSE	S : SW	0·5	0·0	0·0	233	0·00
2	First Qr.	29·847	68·8	44·8	56·0	45·3	127·3	38·8	58·5	57·5	10·7	22·0	0·0	+ 5·7	SSW	SW : S	4·8	0·0	0·7	312	0·00
3	..	29·706	71·5	46·6	59·1	46·1	129·6	39·0	58·5	57·3	13·0	23·0	1·3	+ 8·3	Calm : SW	SW	3·5	0·0	0·4	315	0·02
4	..	29·707	64·0	51·1	55·7	50·6	83·4	47·1	58·6	57·1	5·1	10·3	2·0	+ 4·5	SW	SSW	1·5	0·0	0·0	181	0·05
5	..	29·549	74·0	53·6	61·0	51·0	132·9	49·0	58·9	57·7	10·0	20·4	0·8	+ 9·5	SE : S	SW	1·0	0·0	0·0	293	0·09
6	In Equator Apogee	29·850	72·3	47·0	57·9	44·6	132·2	41·4	58·9	57·7	13·3	24·5	0·0	+ 6·2	WSW	SW	0·0	0·0	0·0	174	0·00
7	..	29·821	60·2	40·5	50·9	47·3	76·5	34·0	59·8	58·4	3·6	13·7	0·0	− 0·8	Variable	SE : E	4·0	0·0	0·1	116	0·56
8	..	29·744	69·1	38·9	53·0	51·6	126·7	32·2	59·4	58·6	1·4	14·4	0·0	+ 1·3	Calm	NNE : E	0·0	0·0	0·0	164	0·00
9	..	29·466	70·0	48·3	57·1	51·3	122·0	47·3	59·3	58·3	5·8	14·4	0·0	+ 5·6	NE : WSW	SW	0·4	0·0	0·0	182	0·57
10	Full	29·357	51·1	46·8	47·9	45·9	69·5	45·0	59·0	57·9	2·0	3·2	0·4	− 3·4	NNW	N	0·0	0·0	0·0	164	0·98
11	..	29·500	48·8	43·6	45·4	42·7	63·0	43·6	58·9	57·7	2·7	2·9	0·0	− 5·8	NNE	N : SW	0·0	0·0	0·0	216	0·58
12	..	29·748	61·7	42·9	49·1	40·4	111·6	39·3	58·9	57·7	8·7	17·3	0·2	− 2·1	SW	SW	1·6	0·0	0·2	315	0·01
13	Greatest Declination S	29·848	65·6	39·2	51·8	41·3	131·8	33·8	59·9	58·8	10·5	21·3	0·2	+ 0·4	SSW : SW	SW	0·6	0·0	0·0	158	0·00
14	..	29·704	60·9	46·8	52·0	46·5	107·0	46·6	58·9	57·7	5·5	11·6	0·6	+ 0·3	NE	NE : SE	0·0	0·0	0·0	87	0·06
15	..	29·496	60·6	44·4	50·0	45·7	95·8	38·5	57·9	56·7	4·3	8·4	0·0	− 2·0	Calm : SW	SW	2·5	0·0	0·2	271	0·02
16	..	29·694	62·1	39·2	48·8	40·4	127·9	30·9	57·4	56·2	8·4	18·1	1·6	− 3·5	SW	SW	0·7	0·0	0·0	285	0·00
17	..	29·766	63·0	43·2	52·8	48·7	104·2	37·8	57·3	56·2	4·1	13·7	2·8	+ 0·2	SW	SW	3·0	0·0	0·2	274	0·00
18	Last Qr.	29·980	66·1	46·0	54·9	42·2	110·2	45·9	57·9	56·7	12·7	20·7	1·1	+ 2·0	W	NNW	0·0	0·0	0·0	148	0·00
19	..	30·189	72·8	41·0	57·7	44·4	127·5	32·2	58·5	57·3	13·3	27·4	0·0	+ 4·5	WSW	WSW : NW	0·0	0·0	0·0	126	0·00
20	In Equator	30·143	72·8	45·9	59·6	45·1	130·2	38·3	58·9	57·7	14·5	25·0	0·0	+ 6·1	Variable	E	0·5	0·0	0·0	160	0·00
21	..	29·858	78·5	51·0	64·7	56·8	135·6	43·0	60·6	59·4	7·9	19·0	4·6	+ 10·9	ENE	E : SE	0·0	0·0	0·0	89	0·00
22	Perigee	29·810	76·2	53·6	64·6	54·8	137·2	45·6	61·4	59·7	9·8	19·7	0·0	+ 10·5	Calm : SW	SW	1·5	0·0	0·0	125	0·33
23	..	29·834	78·0	50·8	63·4	55·1	134·6	43·3	61·9	60·2	8·3	19·4	0·0	+ 9·1	SSE	SW	1·5	0·0	0·0	155	1·03
24	New	29·925	68·7	48·7	57·7	48·1	136·5	45·0	62·0	60·7	9·6	18·7	2·3	+ 3·1	SW	SW	1·0	0·0	0·1	179	0·00
25	..	29·967	72·2	44·4	58·1	49·2	136·2	36·4	62·9	61·7	8·9	18·0	0·0	+ 3·2	SW	SW	0·0	0·0	0·0	116	0·00
26	Greatest Declination N	29·838	75·0	42·3	60·6	50·6	135·3	..	64·3	63·9	10·0	22·5	0·0	+ 5·4	Calm : SSW	S	0·0	0·0	0·0	138	0·00
27	..	29·733	74·8	53·0	62·9	51·4	136·6	44·8	65·0	63·8	11·5	19·3	2·6	+ 7·5	SW : WSW	SW	1·5	0·0	0·1	310	0·00
28	..	29·760	70·2	54·0	59·7	50·4	116·5	50·8	64·9	63·7	9·3	18·4	2·6	+ 4·0	SW	SW	3·0	0·0	0·5	331	0·07
29	..	29·702	73·8	51·4	61·5	54·3	121·3	45·6	65·2	64·2	7·2	16·4	1·4	+ 5·5	SW	SW	2·8	0·0	0·3	449	0·00
30	..	29·692	69·7	54·9	60·1	43·8	134·2	52·4	65·9	65·1	16·3	21·8	8·4	+ 3·8	WSW	WSW	10·0	0·0	2·9	306	0·00
31	..	29·786	71·7	49·2	58·4	48·5	124·7	45·0	64·3	62·7	9·9	19·6	2·9	+ 1·8	WSW	SW	0·0	0·0	0·0	160	0·00
Means	..	29·769	67·9	46·3	56·1	47·5	117·6	41·1	60·4	59·2	8·6	17·6	1·2	+ 3·2	...	...	..	..	..	Sum 6532	Sum 4·37

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was $29^{\text{in}}\cdot750$ on the 4th; the first minimum in the month was $29^{\text{in}}\cdot651$ on the 3rd.
The second maximum ,, was $29^{\text{in}}\cdot898$ on the 6th; the second minimum ,, was $29^{\text{in}}\cdot527$ on the 5th.
The third maximum ,, was $29^{\text{in}}\cdot871$ on the 13th; the absolute minimum ,, was $29^{\text{in}}\cdot346$ on the 10th.
The absolute maximum ,, was $30^{\text{in}}\cdot219$ on the 20th; the fourth minimum ,, was $29^{\text{in}}\cdot455$ on the 15th.
The fifth maximum ,, was $29^{\text{in}}\cdot984$ on the 25th; the fifth minimum ,, was $29^{\text{in}}\cdot796$ on the 22nd.
The sixth maximum ,, was $29^{\text{in}}\cdot822$ on the 28th; the sixth minimum ,, was $29^{\text{in}}\cdot721$ on the 28th.
The seventh maximum ,, was $29^{\text{in}}\cdot808$ on the 31st; the seventh minimum ,, was $29^{\text{in}}\cdot573$ on the 29th.
The range in the month was $0^{\text{in}}\cdot873$.
The mean for the month was $29^{\text{in}}\cdot769$, being $0^{\text{in}}\cdot005$ *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 78°·5 on the 21st; the lowest was 31°·4 on the 1st.
The range ,, was 47°·1.
The mean ,, of all the highest daily readings was 67°·9, being 3°·4 *higher* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 46°·3, being 2°·1 *higher* than the average of the preceding 24 years.
The mean daily range was 21°·6, being 1°·4 *greater* than the average of the preceding 24 years.
The mean for the month was 56°·1, being 3°·2 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
May 1	0	w N : w	10 : 10, ci.-s	10, ci.-s, cu.-s : 10, v, sl.-r : 0, hs
2	w N	w N : 0	10, sl.-r : 8, ci, ci.-cu, ci.-s	8, ci, ci.-cu : 7, ci, ci.-cu : 0
3	w N	w N : 0 : w	4, ci	5, ci, ci.-cu : 10, ci.-s, cu.-s, [illegible]
4	w	0 : w	10 : 10, sl.-r	10, ci.-s, c.-r : 10, ci.-cu, ci.-s
5	s	w	10, r : 7, li.-cl, sl.-r	2, ci, ci.-cu : v, r
6	w	w	3, ci, ci.-cu	6, ci, ci.-cu : 0, m
7	w	m : 0	10, th.-cl, r	10, h-r : 8, ci, ci.-s
8	0	w	10, th.-cl, h	10, th.-cl : 3, ci, v : 8, th.-cl, ci.-s
9	ss : 0	w	10, t-s, h-r : 10, cu.-s, ci.-s	8, ci : 7, th.-cl : 5, lu.-co
10	m	m N : w : 0	10, h-r	10, th.-r : 10
11	m N	m N : w N : w	10, r : 10, c.-r	10, c.-r : 10 : 10, c.-r
12	w N	w : m	10 : 10, sl.-r	7, th.-cl, ci.-cu : v, th.-cl : 0
13	w	w	6, ci, ci.-cu, cu	4, ci, ci.-cu, cu : 10, v, th.-r
14	w	w	10, r : 10, th.-cl : 10, th.-cl	10, th.-cl : 10, ci.-cu, cu.-s
15	w	w	10 : 10 : 10, sl.-r	10, sl.-r : 10, shs.-r : 0
16	w	m : 0	8, ci, ci.-cu	10 : v : 0
17	0	0 : w	10, sl.-r	10, ci.-s, cu.-s : 10, ci.-s, th.-cl : 10, th.-cl
18	w	w : 0 : w	7, li.-cl, h	5, ci, ci.-cu, h : 5, ci, ci.-cu, ci.-s, h
19	w	w : m	4, ci, h	4, ci.-h : v, ci, ci.-s
20	w	w	0 : 0	0 : 0
21	w	w : m	0 : 0, h	v, li.-cl : 10, ci.-s, oc.-r, t.-s
22	w	w : m	0 : t.-s, h.-r : 7, ci.-h	4, ci, ci.-cu : 0
23	m	s N, s P, g-cur, sps.: 0	7, ci, ci.-cu	7, li.-cl, ci, ci.-cu : t.-s, h.-r, hl : t.-s, r : 10, r
24	0	w	6, ci, ci.-cu, cu, cu.-s	6, ci, ci.-cu : v : 0
25	w	w	0	5, ci, ci.-cu, v : 0, ci
26	0	w	0 : 0	2, ci : th.-cl, ci : 0, h
27	w	w : m	0 : 0, h	4, th.-cl, ci : 7, th.-cl : 10, th.-cl
28	w	w	10 : 10 : 10, r, cu.-s	7, th.-cl, ci, ci.-cu : 6, th.-cl
29	w	w	10	10 : v : 10
30	w : w N		5, ci, ci.-cu	6, ci, ci.-cu : 9, th.-cl : 10, h
31		w : 0	10 : 10, li-cl, h	10, ci, cu : 10, cu.-s, ci.-s

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 59°·1 on the 23rd; and the lowest was 37°·2 on the 1st.

The mean ,, was 47°·5, being 1°·9 *higher* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot329$, being $0^{\text{in}}\cdot026$ *greater* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $3^{\text{grs}}\cdot6$, being $0^{\text{gr}}\cdot1$ *greater* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 73 (that of Saturation being represented by 100), being 4 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 534 grains, being 8 grains *less* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·4.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 1·2.

WIND.

The proportions were of N. 3, S. 11, W. 11, E. 2, and Calm 4. The greatest pressure in the month was $10^{\text{lbs}}\cdot0$ on the square foot, on the 30th.

RAIN.

Fell on 13 days in the month, amounting to $4^{\text{in}}\cdot37$, as measured in the simple cylinder gauge partly sunk below the ground; being $2^{\text{in}}\cdot25$ *greater* than the average fall of the preceding 50 years.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer, with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Osler's. General Direction. P.M.	Osler's. Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
June 1	First Qr.	29·072	68·0	47·2	55·9	50·7	112·4	40·8	64·6	62·7	5·2	16·0	0·0	− 1·1	ESE	E : ENE	3·8	0·0	0·9	357	0·62
2	In Equator	29·526	60·7	52·0	54·3	51·8	88·2	51·8	64·3	62·7	2·5	7·4	0·0	− 3·0	ENE : SW	SW	3·0	0·0	0·3	355	0·39
3	Apogee	29·824	70·2	51·2	58·1	54·6	109·5	..	63·9	62·7	3·5	11·0	0·0	+ 0·7	SW	W	0·0	0·0	0·0	169	0·03
4	..	30·117	70·8	51·1	59·9	51·1	111·4	44·4	63·9	63·2	8·8	18·0	0·0	+ 2·6	NNW	NNW : N	0·0	0·0	0·0	124	0·00
5	..	30·173	76·8	50·9	64·7	56·8	129·5	43·1	64·8	63·7	7·9	18·7	0·0	+ 7·5	SW	SW : NW	0·0	0·0	0·0	130	0·00
6	..	30·158	80·0	62·2	68·9	59·7	130·0	59·0	64·9	64·6	9·2	17·3	5·1	+ 11·9	NW : SW	WSW : NW	0·0	0·0	0·0	143	0·00
7	..	30·235	74·1	53·9	61·3	53·3	124·2	50·8	65·1	64·7	8·0	16·3	1·9	+ 4·3	NNW : N	NE : ESE	0·7	0·0	0·0	145	0·00
8	..	30·323	75·2	45·4	60·4	49·8	136·2	37·2	65·6	64·7	10·6	21·6	0·0	+ 3·1	Calm	SE	0·0	0·0	0·0	134	0·00
9	Full : Greatest Dec. S	30·191	82·0	54·5	67·0	55·6	128·9	47·0	67·4	66·7	11·4	24·6	0·6	+ 9·3	SW : W	NW : ESE	0·0	0·0	0·0	109	0·00
10	..	29·971	76·4	52·8	63·3	52·5	123·1	47·1	67·6	66·7	10·8	19·9	0·0	+ 5·3	Calm : NNW	NNW	0·5	0·0	0·0	311	0·00
11	..	30·111	66·8	48·3	55·1	41·6	126·8	42·0	67·9	66·7	13·5	20·2	3·4	− 3·2	NNW	N	1·2	0·0	0·0	235	0·00
12	..	30·284	67·8	41·2	54·0	43·6	129·8	34·1	67·6	66·4	10·4	21·2	1·2	− 4·6	NNW : N	NNE : SE	0·0	0·0	0·0	156	0·00
13	..	30·259	77·0	44·3	60·5	49·6	124·8	35·8	67·6	66·2	10·9	23·0	0·0	+ 1·7	SW : Calm	N : E	0·0	0·0	0·0	101	0·00
14	..	30·218	75·2	46·5	60·2	52·7	126·1	40·3	66·4	66·2	7·5	19·6	0·0	+ 1·2	Calm	E	0·0	0·0	0·0	95	0·00
15	..	30·231	73·8	44·4	58·3	51·6	120·0	36·2	66·4	65·7	6·7	17·3	0·0	− 0·7	Calm	NE : ESE	0·0	0·0	0·0	144	0·00
16	In Equator : Last Quarter	30·246	70·0	50·9	57·7	47·7	122·6	50·1	66·4	65·4	10·0	18·2	2·4	− 1·3	NE : N	NNE	0·0	0·0	0·0	263	0·00
17	..	30·194	73·7	48·8	58·7	49·1	132·0	44·6	66·8	65·7	9·6	21·4	2·9	− 0·3	NNE	N : NNE	0·0	0·0	0·0	246	0·00
18	Perigee.	30·143	60·8	46·9	52·6	47·5	76·4	39·2	66·4	64·7	5·1	9·5	1·5	− 6·5	N	N	0·0	0·0	0·0	221	0·00
19	..	30·191	70·7	48·8	54·8	48·5	133·2	48·1	65·4	64·2	6·3	17·1	0·8	− 4·4	NNE	NE : ESE	0·0	0·0	0·0	81	0·00
20	..	30·185	79·2	42·4	60·1	45·9	140·8	34·6	65·9	64·7	14·2	29·2	0·0	+ 0·6	Calm	NNE : ESE	0·0	0·0	0·0	74	0·00
21	..	30·178	85·4	43·3	65·8	50·3	140·5	33·1	66·1	64·8	15·5	34·3	0·0	+ 5·9	Calm	SE	0·0	0·0	0·0	112	0·00
22	Greatest Declination N	30·148	77·7	51·4	62·6	52·5	111·8	43·8	66·8	65·2	10·1	21·4	0·0	+ 2·3	Calm	NNE : ESE	0·0	0·0	0·0	84	0·00
23	New	29·991	87·6	49·4	68·1	48·9	148·4	42·0	66·9	65·4	19·2	39·3	0·0	+ 7·4	Calm : WSW	W	0·0	0·0	0·0	269	0·00
24	..	30·008	73·8	58·8	64·0	43·7	137·2	54·1	66·9	65·4	20·3	28·1	14·3	+ 2·8	NW : N	NNW	0·0	0·0	0·0	225	0·00
25	..	29·937	76·5	52·1	61·8	46·0	107·2	51·2	65·9	65·7	15·8	26·0	7·8	+ 0·2	NNW : W	W	0·7	0·0	0·0	277	0·00
26	..	29·959	71·4	51·8	59·8	52·6	105·8	44·2	65·4	64·7	7·2	16·2	2·6	− 1·9	WSW : NW	W : N	0·0	0·0	0·0	154	0·00
27	..	30·026	74·8	51·5	61·7	51·5	121·5	45·6	65·7	64·7	10·2	17·7	0·4	+ 0·1	Calm	Calm : SE	0·0	0·0	0·0	90	0·00
28	..	29·862	77·0	47·0	60·2	50·2	138·7	38·9	65·9	64·7	10·0	22·6	0·0	− 1·3	SE	SSE : SE	0·0	0·0	0·0	154	0·00
29	In Equator	29·397	68·0	53·2	59·3	48·4	88·9	48·6	66·0	64·8	10·9	18·5	0·2	− 2·1	ESE	ESE : E	0·0	0·0	0·0	150	0·02
30		29·165	65·0	53·6	56·9	54·8	90·0	52·8	65·4	64·7	2·1	7·9	0·0	− 4·2	Calm : NE	WSW : NNE	0·0	0·0	0·0	327	1·39
Means	..	30·031	73·6	49·9	60·2	50·4	120·5	44·2	66·0	64·9	9·8	20·0	1·5	+ 1·1	...	...	..	..	..	Sum 5435	Sum 2·45

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first minimum in the month was $29^{\text{in}}{\cdot}479$ on the 2nd.
The absolute maximum in the month was $30^{\text{in}}{\cdot}358$ on the 8th; the second minimum ,, was $29^{\text{in}}{\cdot}938$ on the 10th.
The second maximum ,, was $30^{\text{in}}{\cdot}292$ on the 12th; the third minimum ,, was $29^{\text{in}}{\cdot}930$ on the 23rd.
The third maximum ,, was $30^{\text{in}}{\cdot}014$ on the 24th; the fourth minimum ,, was $29^{\text{in}}{\cdot}886$ on the 25th.
The fourth maximum ,, was $30^{\text{in}}{\cdot}063$ on the 27th; the absolute minimum ,, was $29^{\text{in}}{\cdot}120$ on the 30th.
The range in the month was $1^{\text{in}}{\cdot}238$.
The mean for the month was $30^{\text{in}}{\cdot}031$, being $0^{\text{in}}{\cdot}244$ *higher* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 87°·6 on the 23rd; the lowest was 41°·2 on the 12th.
The range ,, was 46°·4.
The mean ,, of all the highest daily readings was 73°·6, being 2°·7 *higher* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 49°·9, being 0°·2 *lower* than the average of the preceding 24 years.
The mean daily range was 23°·7, being 3°·0 *greater* than the average of the preceding 24 years.
The mean for the month was 60°·2, being 1°·2 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
June 1	w	0 : wN	5, ci, ci.-cu	10, th.-cl, ci, cu : 10, h.-r
2	0	0	10, h.-r : 10	10, th.-r : 10, c.-r
3	0	0 : w	10, sl.-r : 10	10, oc.-sh : 10, sl.-r : 10
4	w	w	9, ci.-s, cu.-s, ci, ci.-cu, cu	8, ci, ci.-cu, h : 0, h
5	0	w : 0	0 : 0, h	0, h : v : 10
6	0	0 : w	10 : 10, th.-cl, h	10, ci, ci.-cu, ci.-s, h : 0
7	0	w : 0	10	10, ci, ci.-cu : 0
8	w	w	0 : 0	0 : 0, m
9	m	0 : w	0 : 0, h	4, ci, ci.-cu, h : 0, h : 0, h
10	w	w : wN : w	10	10 : 9, cu, ci.-cu : 10, ci, ci.-s
11	w	0 : w	7, ci, cu.-s, ci.-cu	7, ci.-cu, ci, ci.-s : 10 : 10, ci.-s
12	w	w : 0	5, ci, ci.-cu	6, th.-cl, ci, ci.-cu : 0, h, v
13	0	0 : w	2, li.-cl, h	2, h, li.-cl : 0, h : 0
14	0	0 : w	7, th.-cl, h	0, h : 0, h
15	0	w	4, li.-cl, h	2, ci, h : 4, li.-cl, h : 10, l
16	w	w : 0 : w	9, cu.-s	9, ci, ci.-cu, cu, cu.-s : 0
17	0	w	6, ci.-cu	8, ci, ci.-cu : 9 : 0
18	0	0	10	10 : 10
19	0	w	10 : 10	10, v : 0 : 0
20	w	w	0 : 0	0 : 0
21	w	w : 0 : w	0 : 0	0 : 0
22	w	0 : w	0 : 0, h	0 : 0, h
23	w	wN : 0 : w	5, ci, h	4, ci : 7, ci, ci.-cu, v : 10, th.-cl, ci.-s
24	0	wN : 0 : w	4, li.-cl	5, ci, ci.-cu : 10, th.-cl
25	0	0 : w	10, ci.-cu, ci.-s, cu.-s	9, ci, ci.-cu, h : 9, ci, ci.-cu, ci.-s
26	wN	w : 0	10 : 10, sl.-r	10 : 8, v : 2
27	w	w	10, ci, ci.-cu	10, th.-cl, ci, ci.-cu : 10, v
28	0	w	10 : 10	7, th.-cl, ci, cu : 5, ci, cu
29	w	wP, mN : w	10, ci.-s	10, oc.-sh : 10, h.-r
30	0	sP, sN, sps, g-cur : 0	10, c.-h.-r : 10	10, l, t, h.-r : 10, c.-h.-r

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 63°·2 on the 6th; and the lowest was 41°·1 on the 11th.

The mean ,, was 50°·4, being 0°·3 *lower* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was 0^{in}·366, being 0^{in}·006 *less* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 4^{grs}·1, being 0^{gr}·1 *less* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 70 (that of Saturation being represented by 100), being 5 *less* than the average of the preceding 24 years

Weight of a Cubic Foot of Air.—The mean for the month was 534 grains, being 3 grains *greater* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 5·9.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·6.

WIND.

The proportions were of N. 9, S. 3, W. 6, E. 6, and Calm 6. The greatest pressure in the month was 3^{lbs}·8 on the square foot on the 1st.

RAIN.

Fell on 5 days in the month, amounting to 2^{in}·45, as measured in the simple cylinder gauge partly sunk below the ground; being 0^{in}·50 *greater* than the average fall of the preceding 50 years.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Readings of Thermometers. Dry. Lowest.	Readings of Thermometers. Dry. Mean Daily Value.	Readings of Thermometers. Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with its blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference between the Dew Point Temperature and Air Temperature. Greatest.	Difference between the Dew Point Temperature and Air Temperature. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Wind as deduced from Anemometers. Osler's. General Direction. P.M.	Osler's. Pressure in lbs. on the square foot. Greatest.	Osler's. Pressure in lbs. on the square foot. Least.	Osler's. Pressure in lbs. on the square foot. Mean of 21 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
July 1	First Quarter; Apogee	29·601	66·1	52·1	57·0	48·9	103·8	51·9	65·3	64·4	8·1	14·8	2·0	— 3·9	NNE	N	3·0	0·0	0·5	272	0·00
2	..	29·910	78·2	48·9	61·9	49·3	138·2	40·9	64·9	64·4	12·6	26·2	0·2	+ 0·8	W : NW	W	0·0	0·0	0·0	189	0·00
3	..	29·918	79·6	48·9	64·5	52·5	117·9	41·8	65·0	64·7	12·0	24·0	2·1	+ 3·2	WSW	SW	0·0	0·0	0·0	142	0·00
4	..	29·828	82·6	52·2	68·6	53·4	139·0	43·9	65·1	64·7	15·2	27·5	3·2	+ 7·1	Calm : SSW	SW	1·5	0·0	0·1	254	0·00
5	..	29·907	80·5	59·8	69·4	56·6	133·8	54·8	65·2	64·8	12·8	22·3	5·4	+ 7·7	WSW	WSW	1·5	0·0	0·0	209	0·00
6	..	29·706	84·2	60·9	69·6	62·6	116·7	60·5	65·2	64·8	7·0	21·8	1·0	+ 7·8	SW : SE	SW : SE	1·7	0·0	0·0	192	0·44
7	Greatest Declination S.	29·617	73·3	59·2	64·4	54·2	135·0	58·5	66·9	66·4	10·2	19·1	1·0	+ 2·5	SW	W	8·0	0·0	1·6	412	0·45
8	Full	29·655	73·1	56·3	64·2	54·6	136·7	53·6	66·8	65·3	9·6	16·9	1·2	+ 2·5	W : WSW	SW	8·0	0·0	1·3	360	0·00
9	..	29·745	75·5	54·1	61·8	55·2	133·7	47·1	..	..	6·6	18·5	1·6	+ 0·1	WSW	WSW	2·6	0·0	0·2	232	0·03
10	..	29·684	70·7	53·0	60·1	51·2	128·0	46·7	..	..	8·9	17·3	0·8	— 1·7	WSW	WNW : WSW	5·0	0·0	0·4	245	0·03
11	..	29·567	70·8	52·6	59·5	47·1	122·1	49·2	66·4	64·9	12·4	18·2	1·6	— 2·3	WSW : W	W : NW	4·0	0·0	0·6	277	0·00
12	..	29·875	71·4	47·0	58·2	48·1	120·2	39·2	66·5	65·6	10·1	22·7	1·0	— 3·8	NW : W	NW : W : SW	2·0	0·0	0·2	250	0·00
13	In Equator; Perigee.	29·773	66·6	52·2	58·1	55·2	88·0	44·8	..	..	2·9	9·0	0·0	— 4·2	SW	SW	6·0	0·0	1·3	335	0·04
14	..	29·757	76·6	54·1	64·2	55·1	133·2	49·8	65·4	64·7	9·1	19·6	0·6	+ 1·7	WSW	SW	0·6	0·0	0·0	235	0·00
15	Last Qr.	29·727	85·0	50·5	67·7	57·7	149·0	44·0	65·9	65·4	10·0	22·4	0·0	+ 5·2	S	SW	1·0	0·0	0·1	281	0·00
16	..	29·878	78·8	61·6	69·6	61·8	118·3	57·0	65·9	65·7	7·8	15·3	3·8	+ 7·2	SW	SW	0·0	0·0	0·0	152	0·00
17	..	29·763	75·7	61·3	67·1	62·8	109·0	58·6	66·4	66·4	4·3	12·1	0·2	+ 4·9	W : Calm	Calm : N : W	0·0	0·0	0·0	193	0·22
18	..	29·712	72·4	53·6	60·4	51·5	136·3	50·7	64·9	64·7	8·9	17·6	2·2	— 1·5	W	SW	0·5	0·0	0·0	219	0·10
19	..	29·641	69·6	53·2	60·4	51·4	112·2	49·0	65·9	65·7	9·0	17·3	0·0	— 1·2	SW	SW	0·0	0·0	0·0	194	0·01
20	Greatest Declination N.	29·685	74·7	51·2	63·0	52·2	139·0	46·0	66·0	65·7	10·8	22·1	0·0	+ 1·6	S : SW	SW	0·6	0·0	0·0	161	0·00
21	..	29·675	73·0	51·4	62·0	54·5	127·8	44·8	66·0	65·7	7·5	18·7	0·4	+ 0·5	Calm	E : Calm	0·0	0·0	0·0	174	0·00
22	New	29·598	71·3	58·4	62·5	52·5	113·7	47·1	66·9	66·7	10·0	17·3	5·7	+ 1·0	N	NE : SE	0·0	0·0	0·0	103	0·02
23	..	29·753	73·4	58·0	65·0	59·6	105·3	52·6	66·9	66·7	5·4	11·5	1·1	+ 3·4	Calm	NE : Calm	0·0	0·0	0·0	58	0·15
24	..	30·023	78·3	56·9	66·4	58·8	127·3	50·7	66·9	66·7	7·6	19·2	0·0	+ 4·7	Calm	S : W	0·0	0·0	0·0	56	0·00
25	..	30·112	78·0	58·3	66·8	57·5	135·0	54·2	66·9	66·7	9·3	18·0	0·0	+ 5·0	Calm	SE	0·0	0·0	0·0	97	0·00
26	..	30·179	81·6	55·6	66·4	55·8	149·0	48·5	66·7	66·6	10·6	24·7	0·0	+ 4·5	Calm	NE : SE	0·0	0·0	0·0	95	0·00
27	In Equator.	30·047	85·0	53·1	69·2	59·8	141·0	46·4	66·8	66·6	9·4	24·0	0·0	+ 7·2	Calm : W	W : NNW	0·0	0·0	0·0	282	0·00
28	Apogee	30·075	74·7	51·9	62·8	48·4	132·2	42·1	66·9	66·7	14·4	24·7	2·4	+ 0·6	N	NW : WNW	0·0	0·0	0·0	224	0·00
29	..	29·872	80·7	51·4	65·4	53·1	148·7	42·8	67·1	66·8	12·3	24·3	0·0	+ 3·1	WSW : W	W : WSW	2·0	0·0	0·2	310	0·00
30	First Qr.	29·843	75·8	54·5	62·4	48·3	139·4	47·6	67·0	66·7	14·1	25·2	1·2	0·0	W : NW	NW : Calm	2·8	0·0	0·1	153	0·00
31	..	29·573	70·1	50·3	58·7	51·6	103·8	41·6	66·5	65·8	7·1	15·5	0·4	— 3·7	SW : Calm	W : N	0·0	0·0	0·0	212	0·78
Means	..	29·797	75·7	54·3	63·8	54·2	126·9	48·6	66·1	65·7	9·6	19·6	1·2	+ 1·9	...	...	..	..	..	Sum 6568	Sum 2·27

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29in·957 on the 3rd; the first minimum in the month was 29in·810 on the 4th.
The second maximum ,, was 29in·916 on the 5th; the second minimum ,, was 29in·575 on the 7th.
The third maximum ,, was 29in·764 on the 9th; the third minimum ,, was 29in·540 on the 11th.
The fourth maximum ,, was 29in·902 on the 12th; the fourth minimum ,, was 29in·701 on the 15th.
The fifth maximum ,, was 29in·890 on the 16th; the fifth minimum ,, was 29in·634 on the 19th.
The sixth maximum ,, was 29in·723 on the 20th; the sixth minimum ,, was 29in·573 on the 22nd.
The absolute maximum ,, was 30in·202 on the 26th; the seventh minimum ,, was 30in·014 on the 27th.
The eighth maximum ,, was 30in·117 on the 28th; the absolute minimum ,, was 29in·443 on the 31st.
The range in the month was 0in·759.
The mean for the month was 29in·797, being 0in·006 *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 85°·0 on the 15th and 27th; the lowest was 47°·0 on the 12th.
The range ,, was 38°·0.
The mean ,, of all the highest daily readings was 75°·7, being 2°·0 *higher* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 54°·3, being 1°·5 *higher* than the average of the preceding 24 years.
The mean daily range was 21°·4, being 0°·6 *greater* than the average of the preceding 24 years.
The mean for the month was 63°·8, being 2°·1 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
July 1	o	o	10 : 10	10, ci.-s : 8, cu, ci.-s : 7, ci
2	o	o : w	7, ci.-cu, ci, ci.-s, h	6, ci, ci.-cu, cu, cu.-s : o
3	w	w : o : w	3, ci, ci.-cu	5, li.-cl, ci, cu, ci.-cu : 4, li.-cl, h
4	o	o	3, ci	4, ci, ci.-cu : 4, li.-cl : 10, ci.-s, cu.-s
5	o	o	5, ci, ci.-cu	5, ci, ci.-cu : 7, th.-cl, ci, cu
6			10, h.-r : 8, cu, ci.-cu, r	10, ci.-cu, cu, sl.-r : 10, h.-r, l, t
7			10, h.-r : 8, ci, ci.-cu, cu, v	7, ci.-cu, cu, ci, w, v : o
8			6, th.-cl, sl.-r	5, ci, cu, th.-cl : 4, ci, ci.-cu
9			8, ci.-cu, cu, sl.-r	8, t, shs.-r : 10, t, l, s, cu.-s, sl.-r, v
10			7, cu.-s, ci.-cu, ci, t, oc.-shs	6, ci.-cu, cu.-s, oc.-shs : 8, cu, ci.-s, t : 8
11			10, sl.-r	10 : 7, cu.-s, ci.-s : o
12			2, ci, h	8, cu, ci.-cu, ci.-s : o
13		o : w	10, r : 10, oc.-r	10, oc.-r : 10, oc.-r
14	w	w : m	8, th.-cl, ci, cu	6, ci, ci.-cu : o
15	w	w	4, li.-cl, ci, v	o : o
16	w	w	10	10, cu.-s : v, ci, ci.-cu : 10, sl.-r, l, t, ci.-s
17	w	w : sP, sN, sps, g.-cur.	7, ci, ci.-cu, h	10, h.-r, t, l, cu, cu.-s : 10, oc.-r : 10
18			4, ci, ci.-cu	10, ci.-s, cu.-s, cu, oc.-r : 5, ci, ci.-s, cu.-s, v
19			10, sl.-r : 8, ci.-cu, cu, h	10, ci.-s, cu.-s, s : v : 1, ci, ms
20			6, ci, ci.-cu, cu	7, ci, ci.-cu, cu.-s : 3, ci, ci.-s
21			10, ci, th.-cl	10, ci, ci.-cu : 10, ci, ci.-s
22		o	10 : 10, th.-r	10, v : 7, ci, ci.-cu, cu : 6, ci, ci.-s
23	o	w	10, r : 10, c.-r	10, oc.-r : 10, ci, ci.-s, cu.-s
24	o	o : w	10, sl.-r : 6, li.-cl, h	6, li.-cl, ci, h : 10, sl.-r
25	w	w	3, li.-cl, h	2, ci, h : o, h : o
26	w	w	o : o, h	2, ci, h : o : o
27	w	w : o	o : o	5, li.-cl : 10, li.-cl, v : 10, cu, cu.-s
28	w	w : o	7, ci, ci.-cu	4, th.-cl, ci, ci.-cu : o
29	w	o : w	10, ci, ci.-cu	4, ci : 6, ci, ci.-cu : 10, cu.-s, v
30	o	o : w	10, ci	8, th.-cl, ci.-cu : v : 3, ci, ci.-s
31	m	w : o	10, sl-r : 10	10 : 10, h.-r : c.-h.-r

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was $65^{\circ}\cdot8$ on the 17th; and the lowest was $44^{\circ}\cdot0$ on the 11th.

The mean ,, was $54^{\circ}\cdot2$, being $0^{\circ}\cdot6$ *higher* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot421$, being $0^{\text{in}}\cdot008$ *greater* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $4^{\text{grs}}\cdot7$, being $0^{\text{gr}}\cdot1$ *greater* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 72 (that of Saturation being represented by 100), being 6 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 527 grains, being 1 grain *less* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·5.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·7.

WIND.

The proportions were of N. 4, S. 7, W. 14, E. 1, and Calm 5. The greatest pressure in the month was $8^{\text{lbs}}\cdot0$ on the square foot on the 7th and 8th.

RAIN.

Fell on 11 days in the month, amounting to $2^{\text{in}}\cdot27$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{\text{in}}\cdot32$ *less* than the average fall of the preceding 50 years.

ELECTRICITY.—The Electrical apparatus was not in action from July 6 to 12, and 18 to 22.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames at Greenwich, by Self-Registering Thermometers, read at 9 A.M. Highest.	Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Greatest.	Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	P.M.	Pressure in lbs. on the square foot. Greatest.	Least.	Mean of 24 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Aug. 1	..	29·598	64·5	49·3	54·4	46·4	103·5	40·8	65·9	65·7	8·0	13·7	0·0	− 8·0	NW	NW : W	2·5	0·0	0·1	238	0·09
2	..	29·507	60·5	45·0	52·4	49·4	125·8	36·1	65·4	64·2	3·0	7·4	0·0	−10·0	SW	SW : Calm	2·0	0·0	0·1	173	0·16
3	Greatest Declination S	29·578	62·7	43·2	50·4	48·1	106·0	37·8	63·9	62·9	2·3	9·5	0·0	−12·0	Calm : NW	W : NW	3·0	0·0	0·1	346	0·62
4	..	29·825	65·8	49·0	54·3	48·4	118·0	49·0	63·0	62·7	5·9	15·3	1·3	− 8·0	NNW	N : Calm	2·5	0·0	0·3	171	0·05
5	..	29·926	72·6	44·2	58·6	49·7	127·8	38·7	63·6	63·5	8·9	20·7	0·0	− 3·6	Calm : WSW	WSW	0·0	0·0	0·0	175	0·00
6	..	29·852	74·1	52·1	62·9	56·2	132·4	46·0	64·3	63·7	6·7	17·7	0·0	+ 0·8	WSW	WSW : SW	0·8	0·0	0·0	274	0·00
7	Full	29·678	75·8	57·5	64·5	57·4	133·5	54·2	64·3	63·7	7·1	16·7	1·1	+ 2·5	SW : WSW	W : NW	0·8	0·0	0·0	243	0·22
8	..	29·817	71·2	51·2	60·6	50·8	106·9	46·4	63·9	63·8	9·8	18·7	0·0	− 1·4	WSW : NW	NW	0·0	0·0	0·0	103	0·00
9	Perigee In Equator	29·729	76·2	47·5	61·8	51·4	129·0	41·1	63·8	63·7	10·4	21·1	0·0	− 0·3	Calm	SW	0·0	0·0	0·0	129	0·00
10	..	29·560	76·5	52·0	62·6	54·9	126·8	48·0	64·0	63·7	7·7	17·9	0·0	+ 0·5	Calm : SW	SW : Calm	0·0	0·0	0·0	124	0·51
11	..	29·445	71·0	57·8	61·9	57·1	99·4	55·3	64·9	64·7	4·8	11·5	1·1	− 0·2	Calm : SSW	SW	1·5	0·0	0·1	278	0·02
12	..	29·620	70·4	51·3	59·7	53·4	120·8	46·9	64·9	64·7	6·3	15·8	0·0	− 2·3	SSW	S : SW	3·0	0·0	0·2	295	0·03
13	Last Qr.	29·646	71·5	53·8	61·0	52·9	117·9	50·2	65·8	64·7	8·1	16·6	0·4	− 0·9	SW	SW	2·0	0·0	0·1	278	0·00
14	..	29·605	73·2	53·0	60·3	54·8	127·8	49·0	64·9	64·7	5·5	16·7	0·0	− 1·4	SSW : SW	WSW	2·2	0·0	0·1	293	0·09
15	..	29·411	67·1	53·0	59·9	59·0	85·4	52·8	62·9	62·7	0·9	4·0	0·0	− 1·6	SW	WSW	3·0	0·0	0·4	337	0·16
16	Greatest Declination N	29·561	69·0	54·1	60·2	52·0	110·9	51·2	62·9	62·7	8·2	13·7	0·0	− 1·1	WNW	W	4·0	0·0	0·4	339	0·01
17	..	29·661	69·2	51·4	59·5	50·9	125·0	44·8	63·4	63·2	8·6	16·6	0·0	− 1·6	W	W	6·0	0·0	1·1	420	0·03
18	..	29·700	70·0	52·9	59·6	50·7	111·2	49·7	63·6	63·4	8·9	17·3	0·8	− 1·4	W : NW	NW : N	3·0	0·0	0·5	157	0·00
19	..	29·785	72·2	46·6	59·8	51·1	116·1	39·2	63·9	63·7	8·7	20·5	0·0	− 1·1	Calm	NE : SSW	0·0	0·0	0·0	96	0·00
20	..	29·627	75·5	52·9	62·6	55·2	121·2	47·4	64·3	63·7	7·4	16·2	0·4	+ 1·8	Calm : WSW	SW	0·5	0·0	0·0	223	0·00
21	New	29·595	74·7	54·8	63·2	55·6	125·9	..	64·4	64·2	7·6	17·3	0·0	+ 2·5	SW : WNW	W : SW	1·0	0·0	0·1	200	0·05
22	..	29·536	77·4	56·0	64·7	56·3	124·0	50·1	64·9	64·7	8·4	21·3	0·4	+ 4·0	SW : W	WSW : SW	0·0	0·0	0·0	120	0·00
23	In Equator.	29·35	62·4	52·0	56·8	56·7	72·5	47·4	..	..	0·1	1·9	0·0	− 3·8	Calm : SE	E : NE : W	0·0	0·0	0·0	179	1·79
24	..	29·682	74·5	56·3	63·8	56·1	127·9	54·4	63·9	63·7	7·7	16·2	1·1	+ 3·3	W	W : Variable	0·0	0·0	0·0	145	0·10
25	Apogee	29·938	71·0	53·4	60·2	56·7	114·6	46·9	64·2	64·0	3·5	10·8	0·0	− 0·3	NE	NE : E	0·0	0·0	0·0	111	0·01
26	..	30·116	73·4	50·7	60·8	54·7	127·1	48·9	65·1	64·7	6·1	19·1	0·0	+ 0·5	Calm	SE	0·0	0·0	0·0	72	0·00
27	..	29·986	78·0	45·7	61·9	56·1	126·0	..	65·3	64·7	5·8	20·2	0·0	+ 1·8	Calm	SW : Calm	0·0	0·0	0·0	89	0·00
28	..	29·688	74·0	57·0	64·4	62·0	102·0	51·9	65·9	65·7	2·4	10·9	1·1	+ 4·5	Calm : SW	WSW	3·0	0·0	0·3	258	0·03
29	First Qr.	29·884	62·4	53·3	56·6	48·1	90·0	50·1	..	..	8·5	11·4	4·4	− 3·1	W : N by E	N by E	0·0	0·0	0·0	214	0·00
30	Greatest Declination S	30·131	70·4	49·6	58·6	48·7	120·8	41·2	65·6	64·7	9·9	18·4	0·2	− 0·8	NW : N	NNE : Calm	0·0	0·0	0·0	161	0·00
31	..	30·017	71·0	48·9	59·6	55·5	124·0	41·0	64·9	64·7	4·1	14·8	0·0	+ 0·4	SW : W	W	0·0	0·0	0·0	276	0·00
Means	..	29·711	70·9	51·5	59·9	53·4	116·1	46·8	64·4	64·0	6·5	15·2	0·4	− 1·3	...	...	..	..	..	Sum 6517	Sum 3·97

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29in·637 on the 1st; the first minimum in the month was 29in·495 on the 2nd.
The second maximum ,, was 29in·945 on the 5th; the second minimum ,, was 29in·647 on the 7th.
The third maximum ,, was 29in·834 on the 8th; the third minimum ,, was 29in·415 on the 11th.
The fourth maximum ,, was 29in·699 on the 12th; the fourth minimum ,, was 29in·568 on the 12th.
The fifth maximum ,, was 29in·654 on the 13th; the fifth minimum ,, was 29in·583 on the 14th.
The sixth maximum ,, was 29in·662 on the 14th; the sixth minimum ,, was 29in·392 on the 15th.
The seventh maximum ,, was 29in·696 on the 17th; the seventh minimum ,, was 29in·633 on the 17th.
The eighth maximum ,, was 29in·814 on the 19th; the absolute minimum ,, was 29in·301 on the 23rd.
The ninth maximum ,, was 30in·136 on the 26th; the ninth minimum ,, was 29in·678 on the 28th.
The absolute maximum ,, was 30in·166 on the 30th; the tenth minimum ,, was 29in·951 on the 31st.
The range in the month was 0in·865.
The mean for the month was 29in·711, being 0in·083 *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 78°·0 on the 27th; the lowest was 43°·2 on the 3rd.
The range ,, was 34°·8.
The mean ,, of all the highest daily readings was 70°·9, being 1°·9 *lower* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 51°·5, being 1°·6 *lower* than the average of the preceding 24 years.
The mean daily range was 19°·4, being 0°·3 *less* than the average of the preceding 24 years.
The mean for the month was 59°·9, being [illegible] than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Aug. 1	0	0 : w	10, c.-h.-r : 10 : 10, sl.-r	10, sl.-r : 8, v, cu, ci.-cu
2	s N, s P, g.-cur	w : sP, sN, sps, g-cur : m	10, cu, ci.-s, cu.-s h.-r	7, cu, ci.-cu, ci.-s, n : 7, oc.-h.-shs : 5, ci, ci.-cu, ci.-s
3	w N	w N : sP, sN, sps, g-cur : 0	10, h.-r : 10, r	8, ci, ci.-cu, r : 10, h.-r, l, t : 10, r
4	0	0	10 : 10, oc.-r	10 : 6, ci, ci.-cu
5	m	0 : w : w	5, ci, ci.-cu	5, ci, ci.-cu, cu : 7, cu, ci, ci.-cu : 0, v
6	w	w	10, ci.-cu, cu, cu.-s	9, ci, ci.-cu, cu : v : 6, ci, ci.-s
7	w	0 : w	10, h-r	10, cu, ci.-cu : v, ci, ci.-cu : 10
8	w	0 : m	7, ci, ci.-cu, cu, h	10, cu, cu.-s : 7, ci, ci.-cu, cu
9	w	w : 0 : m	6, ci, cu, h	6, ci, ci.-cu : v, ci, ci.-cu : 10, ci, ci.-cu, m
10	m	w : sP, sN, sps, g-cur	9, ci, ci.-cu	10, ci.-s, cu.-s : 10, h.-r : 10, t.-s, h.-r
11	m	w : 0	10 : 10, sl.-r	10, oc.-r : 10, oc.-r : 0, ms
12	0	w : 0 : w	8, cu, ci.-cu	10, oc.-r : 10, oc.-shs : 9, l, ms
13	w	w	5, ci.-cu, ci	9, li.-cl, ci.-s : 9, li.-cl, th.-r, ms
14	0	w	10, h.-r : 7, ci, ci.-cu, shs.-r	6, ci, cu.-s : 8, oc.-r : 7, ci, ci.-s, m
15	0	0 : w	10, shs.-r : 10, th.-r	10, th.-r : 10, oc.-r
16	m	w : s P : w	6, ci, ci.-cu, sl.-r	8, ci.-cu, ci.-s : 0
17	w	w : sN, sps, g.-cur : w	8, ci.-s, cu.-s, cu	8, oc.-shs : vv, oc.-r : 7, ci, cu, cu.-s, m
18	0	0 : sN, sps, g.-cur : m	8, ci, ci.-cu, cu, v	6, v, sl.-r, h : v : 3, sl.-f
19	m	w	sl.-f : 0, h.-d, h	3, ci.-cu, ci : 7, li.-cl, h : 3, th.-cl, h
20	m	m	5, ci, ci.-cu	8, th.-cl, ci, ci.-cu : 9, ci, ci.-s, cu.-s, sl.-r
21	m	w	10, r : 5, ci.-cu, cu, ci	10, ci.-s, cu, v : vv, ci, ci.-cu : 10, vv, m
22	0	0 : w	0 : 0 : 1, ci	5, ci, cu, ci.-s : v : 0, ms
23	w N	wN : sN, sp, g.-cur : w	10, h-r	10, c.-h.-r, gt.-glm : 10, c.-r
24	w	w : 0	10, h.-r : 8, ci, ci.-cu, cu	6, cu, ci.-cu, ci : vv, l, t : 0
25	0	wP, mN : w	10, ci.-s, v	7, oc.-shs, ci, ci.-cu, cu.-s : 5, ci, ci.-s, ms
26	w	m : 0 : w	m : 10, h	5, ci, ci.-cu, cu : 0, v : 0, ms
27	0	w : m	0 : 0, h.-d, h	0, v : 2, ci, ci.-cu
28	0	w : 0 : w	10, sl.-r : 10, s, ci.-s, sl.-r	10, ci, ci.-cu, ci.-s : 10
29	w	0	9, ci, ci.-cu, cu.-s	10, cu.-s, ci : 4, v, h, ci
30	0	0	4, ci, ci.-cu	5, ci, ci.-cu, ci.-s : 0, d
31	w	0 : w	3, ci, ci.-cu	10 : 10, ci.-s : 10, ci, ci.-cu, ci.-s

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 65°·1 on the 28th; and the lowest was 45°·2 on the 1st.

The mean ,, was 53°·4, being 0°·4 *lower* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot409$, being $0^{\text{in}}\cdot009$ *less* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $4^{\text{grs}}\cdot5$, being $0^{\text{gr}}\cdot1$ *less* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 80 (that of Saturation being represented by 100), being *3 greater* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 529 grains, being *the same as* the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·0.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·6.

WIND.

The proportions were of N. 4, S. 7, W. 13, E. 1, and Calm 6. The greatest pressure in the month was $6^{\text{lbs}}\cdot0$ on the square foot on the 17th.

RAIN.

Fell on 17 days in the month, amounting to $3^{\text{in}}\cdot97$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{\text{in}}\cdot60$ *greater* than the average fall of the preceding 50 years.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer, with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 21 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Sept. 1	..	29·969	70·6	55·2	61·4	51·2	118·0	49·1	64·8	64·2	10·2	18·7	0·0	+ 2·4	W : NW	NW : W	1·0	0·0	0·0	275	0·00
2	..	30·019	80·1	56·0	67·2	59·5	127·8	50·4	64·9	64·7	7·7	19·2	1·2	+ 8·5	W	NW : WSW	0·0	0·0	0·0	182	0·00
3	..	30·039	79·1	56·7	66·5	59·6	123·8	50·0	64·9	64·7	6·9	17·7	0·0	+ 8·1	WSW	WSW	0·0	0·0	0·0	105	0·00
4	..	29·978	81·7	54·9	66·1	61·6	131·8	50·3	65·9	65·3	4·5	18·9	0·0	+ 7·9	Calm	SW	0·0	0·0	0·0	136	0·00
5	Full	30·006	79·0	55·5	65·9	60·0	123·7	49·0	66·1	65·1	5·9	17·2	0·0	+ 7·9	WSW : W	WSW	0·0	0·0	0·0	160	0·00
6	In Equator: Perigee.	29·986	78·5	53·3	65·7	60·3	124·0	46·9	66·6	65·7	5·4	16·0	0·0	+ 7·8	SW	SW	0·0	0·0	0·0	81	0·00
7	..	29·882	83·7	56·7	69·4	62·3	124·5	50·4	66·9	66·7	7·1	19·7	0·0	+11·6	Calm	SW : Calm	0·0	0·0	0·0	96	0·00
8	..	29·789	86·0	59·3	72·1	58·8	130·5	57·7	66·9	66·9	13·3	27·2	0·0	+14·3	Calm	SW	0·0	0·0	0·0	232	0·00
9	..	29·933	76·1	58·7	66·2	54·4	123·8	54·2	67·8	67·6	11·8	18·2	2·9	+ 8·5	WSW : W	WSW	0·0	0·0	0·0	299	0·00
10	..	29·997	78·c	57·9	66·0	60·2	117·2	52·7	66·7	66·5	5·8	17·2	0·0	+ 8·3	WSW : W	W : WSW	3·0	0·0	0·3	353	0·00
11	..	30·182	76·6	63·0	67·8	62·2	106·2	59·4	66·5	66·3	5·6	11·4	2·7	+10·2	W	W	0·0	0·0	0·0	106	0·00
12	Last Quarter. Greatest Dec. N	30·258	77·1	58·2	66·8	57·7	110·4	50·4	66·6	65·7	9·1	16·7	1·0	+ 9·3	Calm	SE : S	0·0	0·0	0·0	94	0·00
13	..	30·156	80·7	57·9	67·6	58·3	123·8	50·4	67·9	66·7	9·3	20·2	0·8	+10·3	SW	SW	0·0	0·0	0·0	80	0·00
14	..	30·109	80·0	52·3	65·6	57·0	125·3	47·0	..	..	8·6	20·7	0·0	+ 8·4	Calm	SE : E	0·0	0·0	0·0	141	0·00
15	..	30·038	84·5	54·8	69·0	54·5	127·3	44·4	..	..	14·5	30·9	0·0	+11·9	Calm : SSE	S by E	0·0	0·0	0·0	143	0·00
16	..	30·002	85·3	59·1	71·7	61·6	127·9	48·5	68·2	67·7	10·1	20·2	4·6	+14·8	S	W : N by E	0·0	0·0	0·0	133	0·00
17	..	30·140	79·1	56·6	66·6	57·7	124·0	56·6	67·9	67·7	8·9	19·2	0·0	+ 9·9	NNE	NNE : SE	0·0	0·0	0·0	99	0·00
18	..	30·274	77·6	52·8	63·6	55·7	123·3	52·8	67·4	66·7	7·9	19·6	0·0	+ 7·1	Calm	NE : SE	0·0	0·0	0·0	62	0·00
19	In Equator; New.	30·221	73·6	52·8	62·7	56·2	120·7	45·6	66·9	66·3	6·5	16·9	0·0	+ 6·5	Calm : SE	SE	0·0	0·0	0·0	124	0·00
20	..	29·958	81·2	49·6	64·1	52·1	127·0	42·6	66·4	65·7	12·0	26·4	0·0	+ 8·1	Calm	SW	0·0	0·0	0·0	205	0·00
21	..	30·053	63·7	54·0	57·0	52·6	77·0	47·5	..	..	4·4	10·3	0·8	+ 1·2	W : NNE	NNE	1·5	0·0	0·1	266	0·16
22	Apogee	30·217	66·2	51·6	57·5	48·8	111·2	45·0	65·9	65·4	8·7	15·6	2·8	+ 2·0	NNE	NNE	0·0	0·0	0·0	143	0·00
23	..	30·307	68·8	40·2	54·7	49·3	112·7	33·2	64·9	64·7	5·4	19·4	0·0	− 0·5	Calm : NE	NE	0·0	0·0	0·0	192	0·00
24	..	30·298	70·0	52·8	59·8	52·7	114·5	50·9	64·9	64·7	7·1	14·6	1·4	+ 4·8	NE : E	E	0·0	0·0	0·0	172	0·00
25	..	30·244	73·5	47·2	58·8	53·1	122·4	39·0	64·8	64·4	5·7	18·4	0·0	+ 4·0	Calm	ESE	0·0	0·0	0·0	157	0·00
26	..	30·089	76·0	49·8	61·3	52·6	120·3	42·4	64·6	64·4	8·7	22·3	0·0	+ 6·7	Calm	ESE	0·0	0·0	0·0	132	0·00
27	Greatest Declination S.	29·951	77·6	47·9	61·5	51·8	126·1	39·7	64·4	63·7	9·7	26·0	0·c	+ 7·1	Calm	ESE	0·0	0·0	0·0	88	0·00
28	First Qr.	30·046	74·0	43·5	57·7	51·7	115·3	34·8	63·9	63·7	6·0	19·7	0·0	+ 3·5	Calm	NE : SE	0·0	0·0	0·0	152	0·00
29	..	30·057	67·7	49·0	57·8	52·5	101·5	39·2	63·9	63·7	5·3	12·8	0·0	+ 3·7	Calm : ENE	ENE : Calm	0·0	0·0	0·0	160	0·00
30	..	29·943	67·4	52·3	58·5	51·4	113·4	45·1	63·4	63·2	7·1	12·8	2·2	+ 4·5	Calm : NE	NE : Calm	0·0	0·0	0·0	131	0·00
Means	..	30·071	76·4	53·6	63·9	55·9	119·2	47·5	65·9	65·5	8·0	18·8	0·7	+ 7·3	...	...	..	..	..	Sum 4699	Sum 0·16

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was $30^{\text{in}}\cdot072$ on the 3rd; the first minimum in the month was $29^{\text{in}}\cdot966$ on the 4th.
The second maximum ,, was $30^{\text{in}}\cdot020$ on the 5th; the absolute minimum ,, was $29^{\text{in}}\cdot762$ on the 8th.
The third maximum ,, was $30^{\text{in}}\cdot286$ on the 12th; the third minimum ,, was $29^{\text{in}}\cdot982$ on the 16th.
The fourth maximum ,, was $30^{\text{in}}\cdot291$ on the 19th; the fourth minimum ,, was $29^{\text{in}}\cdot880$ on the 20th.
The absolute maximum ,, was $30^{\text{in}}\cdot323$ on the 23rd; the fifth minimum ,, was $29^{\text{in}}\cdot933$ on the 27th.
The sixth maximum ,, was $30^{\text{in}}\cdot081$ on the 28th.
The range in the month was $0^{\text{in}}\cdot561$.
The mean for the month was $30^{\text{in}}\cdot071$, being $0^{\text{in}}\cdot254$ *higher* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 86°·0 on the 8th; the lowest was 40°·2 on the 23rd.
The range ,, was 45°·8.
The mean ,, of all the highest daily readings was 76°·4, being 9°·1 *higher* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 53°·6, being 4°·8 *higher* than the average of the preceding 24 years.
The mean daily range was 22°·8, being 4°·3 *greater* than the average of the preceding 24 years.
The mean for the month was 63°·9, being 7°·0 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Sept. 1	w	0 : w	10, ci.-s, cu.-s, s, v	3, ci, ci.-cu, h : 10
2	0	0 : w : m	10, ci, cu, ci.-s, cu.-s	6, ci, ci.-cu : 6, ci, ci-cu, ci.-s
3	w	0	0, h	3, ci, ci.-cu, h, v : 0, d, h
4	w	0 : w : 0	3, ci, cu, h, d	4, ci, ci.-cu, cu : 4, ci, cu : 0
5	w	w : 0 : w	10, ci.-s, s	7, ci, ci.-cu, h : vv, ci, ci.-cu : 2, lu.-co
6	m	0 : w : 0	0, h.-d	4, ci, ci.-cu : 0 : 0, m
7	0	0 : w	0 : 0, h	2, h, ci, ci.-cu : 3, ci, ci.-cu
8	0	0	0	0 : 0, v : v, th.-cl
9	0	w	v, t.-s, sl.-r : 4, ci, ci.-cu	4, ci, v : 10, th.-cl : 1, ci, ci.-cu
10	0	0	10, sl.-r : 10, ci, cu, ci.-s, cu.-s	8, ci, ci.-s, cu : v : 0
11	0	0	10, cu.-s, sl.-r	10, ci, ci.-cu, cu.-s : 10, sl.-r, cu
12	0	0	10, th.-cl, ci, ci.-cu	7, ci, ci.-cu, cu, h, v : 0
13	0	0	10, ci.-s, s	5, cu, ci.-cu, ci : 0 : 0
14	w	w	0 : 0, h, sl.-f	0 : 0, ms
15	w	0 : w	0, h.-d : 0	0 : 0
16	w	0	9, ci, ci.-s, h	2, ci, ci.-cu, h, v : 8, li.-cl, h
17	w	w : 0	1, ci, ci.-cu, h	0, h : 0
18	0	0 : w	0, h.-d, h	3, ci, ci.-cu, cu, h : 0
19	w	0 : w	0, th.-f : 2. ci, ci.-cu, h, d	1, ci, ci.-cu : 0 : 0, m
20	w	w	0 : 0, h	0, h : 0, h, ms
21	0	0	10, r : 10, sc, c.-r	10, ci.-s, cu.-s, ci, ci.-cu, v : 10
22	0	0	1, ci	2, ci, ci.-cu : 0, m
23	0	0 : w	0, f : 1, ci.-cu	4, ci, ci.-cu, cu.-s : 0 : 7, li.-cl
24	0	w : 0	6, ci, ci.-cu, li.-cl	0 : 0, ms
25	0	0 : w : 0	0, f, h.-d	0 : 0
26	m	w : 0	0, h.-d, f	0 : 0, ms
27	w	w	0, h.-d, f	0 : 0, m
28	w	0	0 : 0, h	0, h : 4, ci.-cu, cu, h : 4, ci.-cu, d, ms
29	0	0	10 : 10, cu, ci.-s, v	9, ci.-s, cu.-s, ci, ci.-cu : 6, cu, ci.-cu, m
30	0	0	9, ci, ci.-cu, cu.-s	8, ci, ci.-cu :v, ci, ci.-cu, cu.-s: 0

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 66°·3 on the 7th ; and the lowest was 47°·8 on the 28th.
The mean ,, was 55°·9, being 5°·0 *higher* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot447$ being $0^{\text{in}}\cdot069$ *greater* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $5^{\text{grs}}\cdot0$, being $0^{\text{gr}}\cdot8$ *greater* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 76 (that of Saturation being represented by 100), being 5 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 531 grains, being 3 grains *less* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 3·2.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·4.

WIND.

The proportions were of N. 4, S. 6, W. 7, E. 5, and Calm 8. The greatest pressure in the month was $3^{\text{lbs}}\cdot0$ on the square foot on the 10th.

RAIN.

Fell on 1 day in the month, amounting to $0^{\text{in}}\cdot16$, as measured in the simple cylinder gauge partly sunk below the ground ; being $2^{\text{in}}\cdot28$ *less* than the average fall of the preceding 50 years.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Osler's. General Direction. P.M.	Osler's. Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Oct. 1	..	29·812	70·6	52·3	59·0	52·2	118·2	48·7	62·9	62·7	6·8	20·9	0·2	+ 5·1	Calm	ESE	0·0	0·0	0·0	158	0·00
2	..	29·813	71·7	47·9	59·8	55·1	117·0	39·7	62·9	62·7	4·7	16·4	0·0	+ 6·0	Calm : ESE	ESE : E	0·0	0·0	0·0	164	0·00
3	In Equator	30·021	70·4	51·9	59·8	54·5	110·1	50·0	62·6	62·4	5·3	14·6	0·0	+ 6·1	E	ESE	0·0	0·0	0·0	133	0·00
4	Full	30·007	71·2	40·9	54·8	52·7	110·4	32·2	62·4	61·2	2·1	19·6	0·0	+ 1·3	Calm	ESE	0·0	0·0	0·0	163	0·00
5	Perigee	29·901	66·5	43·8	54·4	44·2	112·1	37·1	61·9	60·7	10·2	21·4	0·0	+ 1·1	Calm : ESE	ESE	0·5	0·0	0·0	156	0·00
6	..	29·861	66·4	41·5	54·2	46·5	110·7	30·4	60·8	59·7	7·7	14·8	0·0	+ 1·3	Calm : SE	SE : Calm	0·0	0·0	0·0	177	0·00
7	..	29·704	65·2	40·3	53·7	43·9	88·7	36·7	59·9	59·2	9·8	22·0	0·0	+ 1·2	Calm : SE	ESE	1·0	0·0	0·0	196	0·00
8	..	29·317	70·6	49·6	57·6	53·4	111·0	45·8	58·9	58·7	4·2	14·4	0·0	+ 5·5	Calm	SSE	1·5	0·0	0·0	143	0·10
9	Greatest Declination N	29·207	66·2	54·6	58·9	57·6	81·7	50·7	59·9	59·7	1·3	6·8	0·0	+ 7·1	SSE	Calm : W	0·0	0·0	0·0	90	0·44
10	..	29·167	68·1	49·3	57·5	54·9	112·2	43·2	59·9	59·7	2·6	11·9	0·0	+ 5·9	Calm : SW	SW : S	0·0	0·0	0·0	200	0·18
11	Last Qr.	29·122	66·5	52·9	57·6	53·3	103·5	49·7	60·4	59·7	4·3	11·7	0·0	+ 6·2	SW	WSW	4·0	0·0	0·6	403	0·15
12	..	29·365	62·4	47·9	53·8	44·7	106·2	43·7	58·9	58·7	9·1	15·2	5·0	+ 2·6	W by S	W	10·0	0·0	1·0	261	0·00
13	..	29·526	62·6	39·4	50·9	47·7	104·1	31·0	57·9	57·7	3·2	12·9	0·0	0·0	W	W : N	0·0	0·0	0·0	124	0·00
14	..	29·790	61·8	43·9	51·1	48·5	108·0	36·9	57·4	57·2	2·6	11·8	0·0	+ 0·5	Variable	Calm	0·0	0·0	0·0	74	0·02
15	..	29·814	53·2	46·8	49·1	47·0	65·0	44·6	..	..	2·1	3·6	0·0	— 1·2	Calm	N	0·0	0·0	0·0	106	0·09
16	In Equator	29·686	58·8	41·0	49·8	47·8	81·2	37·8	..	..	2·0	8·0	0·0	— 0·2	WSW	SW	0·0	0·0	0·0	216	0·00
17	..	29·127	63·4	47·8	53·1	49·0	109·5	42·0	..	..	4·1	10·8	0·0	+ 3·3	SW : W	WSW : SW	3·0	0·0	0·4	207	0·34
18	..	28·909	54·5	43·8	49·0	49·0	72·0	36·5	..	..	0·0	3·2	0·0	— 0·6	SSW : Calm	NE	2·2	0·0	0·0	301	0·46
19	Apogee; New	28·990	51·9	39·9	42·6	41·0	51·9	33·8	53·9	53·7	1·6	3·5	0·9	— 6·7	NNE : N	NW	5·0	0·0	1·2	338	1·06
20	..	29·349	53·1	33·5	42·9	37·8	97·2	28·2	52·9	52·7	5·1	11·8	0·0	— 6·2	W	WNW : W	2·5	0·0	0·2	219	0·00
21	..	29·486	46·6	34·6	41·3	41·1	55·7	25·3	51·9	51·7	0·2	2·5	0·0	— 7·6	W : Calm	ENE : Calm	0·0	0·0	0·0	140	0·14
22	..	29·252	51·0	42·1	46·4	46·4	53·5	40·0	50·9	50·7	0·0	0·8	0·0	— 2·3	E : ENE	NE	0·0	0·0	0·0	195	1·11
23	..	29·501	51·0	45·1	47·1	45·6	59·1	43·0	50·9	50·7	1·5	3·1	0·0	— 1·4	NE	NNE : Calm	0·0	0·0	0·0	124	0·19
24	Greatest Declination S.	29·412	59·8	45·4	51·4	47·7	116·0	44·1	50·8	50·6	3·7	10·8	0·0	+ 3·2	Calm : SW : W	W : SW	7·0	0·0	0·6	466	0·10
25	..	29·450	56·7	42·6	48·7	40·6	93·1	33·0	49·9	49·7	8·1	12·0	3·1	+ 0·8	W	WNW : NW	20·0	0·0	3·0	343	0·00
26	..	29·219	57·2	38·9	48·0	47·8	57·3	31·0	48·9	48·7	0·2	1·9	0·0	+ 0·4	SW : S	SW : WSW	7·0	0·0	0·7	380	0·72
27	First Qr.	28·865	57·7	42·2	47·7	44·4	104·8	36·1	49·8	49·4	3·3	11·2	0·2	+ 0·4	SW	WSW	12·5	0·0	0·3	321	0·06
28	..	29·557	46·3	33·9	39·1	32·7	87·0	28·7	49·9	49·7	6·4	9·9	2·5	— 7·9	N	NNW : SW	3·0	0·0	0·2	268	0·02
29	..	29·133	57·8	33·7	44·4	41·3	60·0	28·1	47·9	47·7	3·1	6·7	0·7	— 2·4	S : SSW	SW : WSW	13·0	0·0	2·1	425	0·13
30	..	29·039	51·6	44·0	47·0	44·0	67·7	39·7	47·9	47·7	3·0	5·9	0·9	+ 0·4	SW	SW	6·0	0·0	0·2	235	0·45
31	In Equator	29·243	49·6	43·3	45·9	44·6	56·7	40·7	47·8	47·6	1·3	4·8	0·0	— 0·6	NE	N	2·0	0·0	0·2	311	0·14
Means	..	29·440	60·0	43·7	50·9	47·0	89·7	38·3	55·6	55·2	3·9	10·5	0·4	+ 0·7	...	...	..	..	..	Sum 7037	Sum 5·90

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first minimum in the month was $29^{\text{in}}\cdot788$ on the 1st.
The absolute maximum in the month was $30^{\text{in}}\cdot074$ on the 3rd ; the second minimum ,, was $29^{\text{in}}\cdot089$ on the 11th.
The second maximum ,, was $29^{\text{in}}\cdot870$ on the 15th ; the third minimum ,, was $28^{\text{in}}\cdot886$ on the 18th.
The third maximum ,, was $29^{\text{in}}\cdot505$ on the 21st ; the fourth minimum ,, was $29^{\text{in}}\cdot220$ on the 22nd.
The fourth maximum ,, was $29^{\text{in}}\cdot561$ on the 23rd ; the fifth minimum ,, was $29^{\text{in}}\cdot258$ on the 24th.
The fifth maximum ,, was $29^{\text{in}}\cdot722$ on the 25th ; the absolute minimum ,, was $28^{\text{in}}\cdot849$ on the 27th.
The sixth maximum ,, was $29^{\text{in}}\cdot698$ on the 28th ; the seventh minimum ,, was $29^{\text{in}}\cdot003$ on the 29th.
The seventh maximum ,, was $29^{\text{in}}\cdot150$ on the 29th ; the eighth minimum ,, was $28^{\text{in}}\cdot992$ on the 30th.
The range in the month was $1^{\text{in}}\cdot225$.
The mean for the month was $29^{\text{in}}\cdot440$, being $0^{\text{in}}\cdot256$ *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 71°·7 on the 2nd ; the lowest was 33°·5 on the 20th ; and the range in the month was 38°·2.
The mean ,, of all the highest daily readings was 60°·0, being 1°·3 *higher* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 43°·7, being 0°·4 *lower* than the average of the preceding 24 years.
The mean daily range was 16°·3, being 1°·7 *greater* than the average of the preceding 24 years.
The mean for the month was 50°·9, being 0°·4 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Oct. 1	0	0	0, h.-d, h : 5, li.-cl, h	0 : 0
2	0	0	0, th.-f : 9, h.-d, v	0 : 0, h.-d
3	w	0 : w	9, li.-cl, sc, h.-d	1, ci : 0, li.-sc, h.-d
4	w	w : 0	10, th.-f	2, li.-cl : 0 : 0, h.-d
5	w	w	0 : 0	0 : 0, h.-d
6	w	0 : w	0, d	0 : 0
7	w	0	0, h.-d : 0	0 : v, ci, ci.-cu, m
8	0	0	v : 10, oc.-r : 10, s, ci.-s, sl.-r	7, cu, ci.-cu, cu.-s : 10, l, r : 10, h.-r
9	0	0 : w	7, ci.-cu, ci.-s, ci, sl.-r	10, oc.-r : 10, h.-r : 10, c.-h.-r
10	0	0 : w : 0	10, c.-r : 10, cu.-s, s	5, ci, ci.-cu, cu.-s, oc.-r : 10, c.-r
11	0	0	10, c.-r : vv, oc.-shs	10, cu.-s, cu, n, sl.-r : v, cu, ci : v, l
12	0	0	8, cu, ci.-cu, ci	6, cu, ci.-cu, ci.-s : 0 : 0, m
13	0	w : 0	0, h.-d, sl.-f, h	5, ci, ci.-cu, h : v, th.-cl, m : 10, th.-cl, h.-d
14	0	0	4, th.-f, h.-d, ci	9, ci.-cu : 10, th.-f : 10, oc.-r
15	0	0	10, sl.-r : 10	10 : 9, v : 8, ci, cu, ci.-s, h.-d
16	w	w : 0	10, th.-f	10, ci, ci.-s : 10, sl.-r
17	0	sP, sN, sps, g.-cur : w	10, sl.-r : 10, h.-r : 8, ci.-cu, cu, ci	6, ci.-cu, cu, vv, r : 0
18	0	0 : wN	10, h.-d, sl.-f, r	10, c.-r : 10, c.-r, oc.-h.-shs
19	0	0	10, h.-r : 10, c.-h.-r, sc	10, c.-h.-r, sc : 0, m
20			0, h	5, ci.-cu, ci.-s, cu : 0
21			10, r	10, sl.-r : vv, ci.-cu : 10, sl.-f, h.-d
22			10 : 10, h.-r	10, th.-r sc : 10, h.-r : 10, c.-h.-r
23			10, c.-r : 10, c.-r	10, oc.-r : 10, oc.-r
24			10, r : 10, c.-r : 10	3, ci, ci.-cu : v, shs.-r : 0
25			2 ci, ci.-cu, cu.-s	9, ci, ci.-s, cu.-s : 0
26			0 : 10, h.-r	10, c.-h.-r : 0, v, l
27			2, ci	4, v, h.-r, w : v, ci.-s, ci.-cu, cu.-s, l : 7, ci.-s, l, sl.-r
28			10, r : 7, ci, ci.-s, ci.-cu	1, ci, ci.-cu, h : 10, ci.-s, lu.-co
29			10 : 10, r	10, c.-r : v : 4, ci
30			10, r	10, c.-r : v, th.-r, l : 10, h.-r
31			10, th.-r : 10, th.-r	10, oc.-r : 10 : 7, ci.-cu

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 60°·0 on the 9th; and the lowest was 30°·8 on the 28th.

The mean ,, was 47°·0, being 0°·7 *higher* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot323$, being $0^{in}\cdot007$ *greater* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $3^{grs}\cdot6$, being $0^{gr}\cdot1$ *less* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 87 (that of Saturation being represented by 100), being *the same as* the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 533 grains, being 6 grains *less* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·2.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·8.

WIND.

The proportions were of N. 3, S. 7, W. 8, E. 5, and Calm 8. The greatest pressure in the month was $20^{lbs}\cdot0$ on the square foot on the 25th.

RAIN.

Fell on 19 days in the month, amounting to $5^{in}\cdot90$, as measured in the simple cylinder gauge partly sunk below the ground; being $3^{in}\cdot14$ *greater* than the average fall of the preceding 50 years.

ELECTRICITY.—The electrical apparatus was out of action from October 20 to 31.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	WIND AS DEDUCED FROM ANEMOMETERS.						Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M.						OSLER'S.					ROBINSON'S.	
															General Direction.		Pressure in lbs. on the square foot.			Amount of Horizontal Movement of the Air on each Day.	
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.		
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
Nov. 1	..	29·746	45·5	33·0	39·1	37·6	74·1	..	43·9	43·7	1·5	7·3	0·0	− 7·3	NW : W	W	0·0	0·0	0·0	160	0·01
2	Perigee	29·846	51·4	31·2	41·4	36·7	91·9	25·4	44·9	44·7	4·7	13·2	0·0	− 4·9	WSW	SW : S	0·0	0·0	0·0	149	0·00
3	Full	29·912	49·5	36·7	42·0	38·6	79·0	30·4	43·9	43·7	3·4	7·6	0·0	− 4·1	N : NW	NNW : WNW	0·0	0·0	0·0	139	0·19
4	..	30·026	47·2	31·7	37·8	35·6	67·8	24·0	43·9	43·7	2·2	8·0	0·0	− 8·1	W	Calm : NNE	0·0	0·0	0·0	61	0·00
5	..	30·054	49·6	31·0	38·9	36·7	95·0	25·1	43·9	43·7	2·2	8·8	0·0	− 6·8	Calm	NNE	0·0	0·0	0·0	169	0·00
6	Greatest Declination N	30·028	47·8	32·7	41·3	37·9	60·0	25·0	43·4	42·7	3·4	8·0	0·0	− 4·2	NNE	NNE	1·0	0·0	0·0	274	0·00
7	..	29·933	45·5	37·9	42·3	38·8	50·5	35·0	43·4	42·7	3·5	5·3	1·4	− 3·0	NNE	NNE	3·0	0·0	0·4	327	0·01
8	..	29·815	51·9	41·3	46·1	42·5	94·9	40·1	43·9	43·7	3·6	6·1	0·4	+ 1·1	NNE : NE	NE	1·5	0·0	0·2	291	0·12
9	..	29·843	50·9	39·7	45·0	41·2	90·9	34·0	44·4	43·7	3·8	6·8	0·9	+ 0·3	NE	NE	1·7	0·0	0·2	242	0·02
10	Last Qr.	30·092	49·3	34·9	41·3	35·1	84·2	27·3	46·9	43·5	6·2	12·4	0·3	− 3·1	NNE	NNW : WSW	0·0	0·0	0·0	190	0·00
11	..	30·137	47·2	33·0	41·8	38·4	52·1	26·8	45·4	42·7	3·4	7·6	0·0	− 2·3	SW	WSW	0·0	0·0	0·0	172	0·00
12	..	30·294	50·2	40·5	44·7	40·1	80·9	34·5	44·9	43·2	4·6	8·4	0·0	+ 0·9	WSW : Calm	Calm : SE	0·0	0·0	0·0	182	0·00
13	In Equator	30·225	47·8	37·4	42·2	34·7	92·1	32·0	43·9	42·7	7·5	12·2	2·8	− 1·3	SE	SE	2·5	0·0	0·4	229	0·00
14	..	29·955	52·6	34·4	45·0	43·7	63·0	29·5	44·4	42·7	1·3	4·8	0·0	+ 1·8	SE	S : SSW	0·0	0·0	0·0	245	0·00
15	Apogee	30·098	52·8	37·3	45·3	41·4	66·0	32·0	44·4	42·7	3·9	9·9	0·0	+ 2·4	SW : NW	NW : SW	0·3	0·0	0·0	155	0·02
16	..	30·090	49·2	32·1	41·9	40·0	80·5	27·4	43·9	42·3	1·9	6·3	0·0	− 0·7	Calm	SSE	0·0	0·0	0·0	238	0·00
17	..	29·628	55·5	44·7	51·0	50·5	57·8	44·7	45·4	42·2	0·5	3·0	0·0	+ 8·7	SSW	SW : W	6·5	0·0	0·4	297	0·37
18	New	30·005	49·3	38·8	43·6	39·8	58·3	33·0	45·9	43·7	3·8	5·7	0·0	+ 1·6	WNW : W	SW : S	0·0	0·0	0·0	245	0·00
19	..	29·679	53·6	45·0	50·4	49·5	54·0	40·0	45·9	43·7	0·9	2·2	0·0	+ 8·6	S : SSW	SSW	3·0	0·0	1·1	469	0·18
20	Greatest Declination S.	29·438	56·2	48·9	52·3	49·6	64·1	46·9	44·9	42·7	2·7	4·8	0·0	+10·7	SW	SW	3·8	0·0	0·7	347	0·19
21	..	29·173	55·7	46·5	50·8	47·3	80·8	45·6	44·9	42·6	3·5	5·9	0·0	+ 9·4	SW	SSW	6·0	0·0	0·6	414	0·15
22	..	28·898	55·5	43·6	50·4	45·2	74·1	43·0	..	..	5·2	8·0	3·3	+ 9·2	SSW	SW	25·0	0·0	4·7	632	0·32
23	..	29·313	54·2	42·4	49·2	45·3	77·8	41·4	..	..	3·9	8·2	0·0	+ 8·1	WSW	SW : SSE	9·0	0·0	0·8	354	0·05
24	..	29·247	56·4	44·8	50·0	44·5	80·7	44·5	..	..	5·5	8·9	0·0	+ 9·0	SW	SW : SSW	21·0	0·0	2·2	440	0·01
25	..	29·051	54·0	44·7	50·8	46·1	61·6	44·6	..	..	4·7	8·2	2·3	+ 9·9	SSE	SSE : S	11·0	0·0	1·1	504	0·08
26	First Qr.	29·222	51·0	41·3	45·6	39·3	81·0	35·2	..	..	6·3	9·7	3·5	+ 4·7	SSW : SW	SW : S	11·5	0·0	0·3	220	0·30
27	In Equator	29·557	48·8	32·6	40·6	38·4	78·1	31·1	..	..	2·2	7·6	0·0	− 0·5	S : E	SE	0·0	0·0	0·0	237	0·00
28	..	29·051	49·5	43·5	46·4	44·3	61·0	39·9	..	..	2·1	3·6	0·0	+ 5·1	SE	SE	2·6	0·0	0·4	196	0·28
29	..	29·438	47·5	40·3	43·8	40·9	51·0	38·8	..	..	2·9	3·7	0·0	+ 2·2	WSW	WSW : SW	0·5	0·0	0·0	222	0·04
30	..	29·806	48·8	38·8	43·7	42·4	59·2	37·4	..	..	1·3	3·4	0·2	+ 1·8	SW : N	N	0·0	0·0	0·0	138	0·05
Means	..	29·720	50·8	38·7	44·8	41·4	72·1	35·0	44·6	43·2	3·4	7·2	0·5	+ 1·6	...	...	..	..	..	Sum 7938	Sum 2·39

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29^{in}·877 on the 2nd; the first minimum in the month was 29^{in}·814 on the 2nd.
The second maximum ,, was 30^{in}·073 on the 5th; the second minimum ,, was 29^{in}·798 on the 8th.
The absolute maximum ,, was 30^{in}·325 on the 12th; the third minimum ,, was 29^{in}·931 on the 14th.
The fourth maximum ,, was 30^{in}·220 on the 15th; the fourth minimum ,, was 29^{in}·543 on the 17th.
The fifth maximum ,, was 30^{in}·024 on the 18th; the absolute minimum ,, was 28^{in}·822 on the 22nd.
The sixth maximum ,, was 29^{in}·357 on the 23rd; the sixth minimum ,, was 29^{in}·157 on the 24th.
The seventh maximum ,, was 29^{in}·430 on the 24th; the seventh minimum ,, was 28^{in}·926 on the 25th.
The eighth maximum ,, was 29^{in}·602 on the 27th; the eighth minimum ,, was 28^{in}·990 on the 28th.
The range in the month was 1^{in}·503.
The mean for the month was 29^{in}·720, being 0^{in}·029 *lower* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 56°·4 on the 24th; the lowest was 31°·0 on the 5th.
The range .. was 25°·4.
The mean ,, of all the highest daily readings was 50°·8, being 1°·7 *higher* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 38°·7, being 1°·3 *higher* than the average of the preceding 24 years.
The mean daily range was 12°·1, being 0°·4 *greater* than the average of the preceding 24 years.
The mean for the month was 44°·8, being 0°·8 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Nov. 1			5, ci, cu ci.-s, h.-fr, h	10, sl.-r : 10, h.-d, sl.-f
2		o : w	o, h, h.-fr	7, ci : 6, ci, ci -s, v : 10, v
3	o	o : w	10, h.-r : o, h, f	2, ci, h : o, th.-f, h.-fr
4	o	w : o	o, th.-f, h.-fr	o, h, f : o, f
5	o	w	o, th.-f : 6, ci.-s, ci.-cu, cu, f	3, v, ci, ci.-cu : o : o, h.-fr
6	w	w	9, ci, ci.-s, h.-fr	10, sl.-r : v, ci.-s : 3, h.-d, ci.-s
7	w	o	10, d, sl.-r	10, ci.-s, oc.-shs : 10, oc.-shs
8	o	o : w	10, h.-shs : o, ci, v	10, cu.-s, ci.-s : vv, th.-cl, m
9	o	o : sN,sp,g.-cur : w	2, li.-cl, ci	10, oc.-shs : o, ms
10	o	w : o	o : o	o : 2, ci, ci.-cu : o, f
11	m	m	o, d : 10, cu.-s, s, sl.-f	10, ci.-s : 10, ci.-s
12	m	m	o, sl.-f	o : o : 4, ci, ms
13	m	w : o	o, ms : o	2, ci : o
14	w	m : o : w	10, h.-fr	10 : 10, m.-r
15	w	w : o : w	10, oc.-shs : 10, oc.-shs, v	4, ci, ci.-cu, cu.-s : o, m
16	w	m	10, ci, ci.-cu, s, h.-fr	10 : 9, ci, ci.-s : 10
17	o	wN : o	10, r	10, c.-r : 10 : o, m
18	w	w : m	o : o, v	9, li.-cl, h : o, ms : o, m
19	w	w : o	10, sl.-r	10, w, shs.-r : 10, oc.-r
20			10, oc.-r : 10, sc, oc.-r	9, v, ci, ci.-s, cu : 10, sl.-r, cu, cu.-s, s
21			10, r : 10, r	10, ci,ci.-s,cu.-s,v,sl.-r,m: v, oc.-shs, m
22			8, cu.-s, ci.-s, sc, r, vv, st.-w	5, ci,ci.-cu,cu,st.-w,sc,shs.-r : o, l, w, m
23			5, li.-cl, ci, w	10, ci, ci.-cu, ci.-s, h : 10, ci.-s, oc.-r
24			10, vv, oc.-shs, ci, li.-cl, sc, st.-w	2,li.-cl,st.-w,oc.-shs : o, ms : o, l, ms
25			10, ci, ci.-s, th.-cl	10, sc.-r : 10, oc.-shs, w
26			10, h.-sqs, r : o, v, li.-cl	3, li.-cl : 1, li.-cl, d, m
27			o, f, h.-fr	4, li.-cl, ci : vv, th.-cl : 10, th.-cl, sl.-r
28	o	o : wN : w	8, ci.-s, oc.-shs	10, sc, r : 10, oc.-shs
29	o	o : m	10 : 10, oc.-r	10, oc.-r : 10, sl.-r
30	w	m	10 : gt.-glm	10 : 8, ci, cu, ci.-s : 10, th.-cl, v

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was $53^{\circ}\cdot4$ on the 17th; and the lowest was $32^{\circ}\cdot8$ on the 4th.

The mean ,, was $41^{\circ}\cdot4$, being $1^{\circ}\cdot5$ *higher* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot261$, being $0^{\text{in}}\cdot009$ *greater* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $3^{\text{grs}}\cdot0$, being $0^{\text{gr}}\cdot2$ *greater* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 88 (that of Saturation being represented by 100), being 1 *less* than the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 546 grains, being 2 grains *less* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·2.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·8.

WIND.

The proportions were of N. 5, S. 11, W. 7, E. 4, and Calm 3. The greatest pressure in the month was $25^{\text{lbs}}\cdot0$ on the square foot on the 22nd.

RAIN.

Fell on 18 days in the month, amounting to $2^{\text{in}}\cdot39$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{\text{in}}\cdot04$ *less* than the average fall of the preceding 50 years.

ELECTRICITY.—The Electrical apparatus was not in action on November 1, and from November 20 to 27.

MONTH and DAY, 1865.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	WIND AS DEDUCED FROM ANEMOMETERS. OSLER'S. General Direction. A.M.	OSLER'S. General Direction. P.M.	OSLER'S. Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	ROBINSON'S. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Dec. 1	Perigee	29·858	48·5	40·8	44·3	41·9	67·8	38·0	..	..	2·4	4·8	0·0	+ 2·2	NNE	E	0·0	0·0	0·0	134	0·05
2	Full	29·622	45·0	37·6	41·6	37·5	70·0	31·8	..	..	4·1	5·5	0·7	+ 0·6	SE	SE	1·0	0·0	0·0	187	0·00
3	Greatest Declination N.	29·405	46·8	37·3	42·0	40·1	57·7	33·0	..	..	1·9	4·2	0·9	− 0·3	SE	SE	0·0	0·0	0·0	212	0·01
4	..	29·169	50·9	39·2	46·3	42·8	65·1	34·7	..	..	3·5	7·3	0·0	+ 4·1	SE	SSE : SW	4·0	0·0	0·4	291	0·03
5	..	29·543	49·5	41·3	45·9	42·9	56·1	37·4	46·0	43·7	3·0	5·3	0·0	+ 3·7	SW : S	S	0·0	0·0	0·0	186	0·01
6	..	29·860	51·9	44·9	48·7	47·2	58·5	44·1	46·0	42·7	1·5	4·0	0·0	+ 6·6	S	S	1·8	0·0	0·1	302	0·01
7	..	30·097	52·7	48·9	50·5	48·6	53·2	47·7	45·5	43·7	1·9	2·6	0·0	+ 8·5	SSW	SW	2·5	0·0	0·2	147	0·16
8	..	30·392	51·3	43·3	46·9	44·1	58·4	39·3	45·7	44·7	2·8	4·2	1·1	+ 5·2	W : Calm	SW : Calm	0·0	0·0	0·0	74	0·00
9	..	30·360	47·7	42·6	45·1	43·8	52·5	40·5	46·0	45·2	1·3	2·1	0·0	+ 3·8	W : Calm	Calm	0·0	0·0	0·0	62	0·00
10	Last Quarter; In Equator.	30·449	44·8	38·5	42·1	40·2	51·0	35·8	46·0	45·7	1·9	4·0	0·0	+ 1·1	Calm	WSW : Calm	0·0	0·0	0·0	68	0·00
11	..	30·528	46·9	35·0	41·9	37·5	63·9	31·0	46·0	45·2	4·4	6·4	0·0	+ 1·2	Calm	NE	0·0	0·0	0·0	137	0·00
12	..	30·446	43·3	34·5	39·9	34·0	52·8	31·8	45·0	44·7	5·9	8·1	0·3	− 0·7	NE	NE	1·0	0·0	0·0	151	0·00
13	Apogee	30·330	40·5	32·7	36·9	32·7	57·8	26·8	45·0	43·7	4·2	6·0	0·3	− 3·6	NNE	N by E	0·0	0·0	0·0	121	0·00
14	..	30·298	44·6	34·9	40·4	35·8	52·2	28·4	45·5	43·4	4·6	6·8	0·5	0·0	N : NW	NNW	0·6	0·0	0·0	265	0·00
15	..	30·555	42·7	35·1	38·4	32·9	48·9	30·7	45·0	42·7	5·5	9·0	2·6	− 1·8	N by E	N	1·0	0·0	0·0	188	0·00
16	..	30·500	43·5	29·9	38·4	35·0	48·2	24·2	43·0	41·7	3·4	5·5	0·0	− 1·6	W by S	W : NW	0·0	0·0	0·0	144	0·00
17	..	30·465	45·2	40·0	43·5	36·6	45·5	39·1	42·0	40·7	6·9	8·1	1·4	+ 3·7	Calm : N	N	0·0	0·0	0·0	83	0·00
18	Greatest Dec. S. New.	30·318	44·3	38·9	41·2	37·6	49·2	33·3	42·0	40·7	3·6	5·7	1·2	+ 1·6	Calm	SE	0·0	0·0	0·0	58	0·00
19	..	30·119	47·0	37·7	42·6	40·1	78·5	35·0	42·0	40·7	2·5	4·8	0·0	+ 3·2	Calm : SE	S by E	0·0	0·0	0·0	227	0·00
20	..	30·081	48·5	39·0	44·7	43·2	53·4	37·1	43·9	41·2	1·5	3·4	0·0	+ 5·6	SW	SW	2·6	0·0	0·3	262	0·00
21	..	30·160	51·3	42·1	47·6	44·5	79·0	39·0	44·0	41·7	3·1	5·7	0·0	+ 8·8	SW	SW	1·5	0·0	0·1	264	0·00
22	..	30·196	48·9	37·5	40·3	35·3	49·0	36·6	42·0	41·2	5·0	9·3	2·8	+ 1·8	S : SSE	SW	0·0	0·0	0·0	155	0·00
23	..	30·253	42·0	34·8	38·7	35·2	47·0	34·8	41·2	40·3	3·5	5·7	1·8	+ 0·6	SW : S	S	0·0	0·0	0·0	87	0·00
24	In Equator.	30·276	35·7	29·2	32·3	31·6	39·2	29·1	41·0	40·6	0·7	2·2	0·0	− 5·5	SSE	Calm	0·0	0·0	0·0	112	0·00
25	First Qr.	30·255	47·2	34·7	42·4	41·1	51·8	34·7	42·0	40·7	1·3	2·5	0·3	+ 4·8	SW	SW	0·5	0·0	0·0	305	0·00
26	..	30·090	48·8	39·5	45·5	43·5	56·2	36·0	43·0	41·7	2·0	5·0	0·0	+ 8·1	SW	SSW : SW	1·5	0·0	0·2	226	0·02
27	..	30·161	43·7	34·1	36·9	35·8	46·0	28·1	43·0	41·7	1·1	2·3	0·0	− 0·4	NW : Calm	Calm	0·0	0·0	0·0	144	0·00
28	..	29·769	48·7	37·3	44·3	41·8	51·0	35·4	43·3	41·8	2·5	4·6	0·0	+ 7·1	S : SW	SW	8·8	0·0	0·8	578	0·04
29	Perigee	29·246	50·9	41·4	47·1	43·8	62·8	40·0	43·9	42·9	3·3	7·4	0·0	+ 9·8	SW	SW	22·5	0·0	4·8	589	0·31
30	..	29·585	43·8	36·0	40·2	33·2	80·0	31·0	44·0	43·2	7·0	9·2	2·3	+ 2·8	WSW	WSW : SW	10·0	0·0	0·2	633	0·00
31	Greatest Declination N.	29·332	50·8	43·8	47·7	41·9	53·8	35·4	43·7	42·2	5·8	10·6	3·0	+10·2	SW	SW	22·5	0·0	6·0	451	0·23
Means	..	30·055	46·7	38·1	42·7	39·4	56·7	34·8	43·9	42·5	3·3	5·6	0·6	+ 2·9	...	...	..	..	..	Sum 6843	Sum 0·87

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29in·912 on the 1st; the first minimum in the month was 29in·145 on the 4th.
The second maximum ,, was 30in·404 on the 8th; the second minimum ,, was 30in·341 on the 9th.
The third maximum ,, was 30in·539 on the 11th; the third minimum ,, was 30in·284 on the 14th.
The absolute maximum ,, was 30in·610 on the 15th; the fourth minimum ,, was 30in·042 on the 20th.
The fifth maximum ,, was 30in·296 on the 25th; the fifth minimum ,, was 30in·069 on the 26th.
The sixth maximum ,, was 30in·243 on the 27th; the absolute minimum ,, was 29in·023 on the 29th.
The seventh maximum ,, was 29in·682 on the 30th; the seventh minimum ,, was 29in·318 on the 31st.
The range in the month was 1in·587.
The mean for the month was 30in·055, being 0in·232 *higher* than the average of the preceding 24 years.

TEMPERATURE OF THE AIR.

The highest in the month was 52°·7 on the 7th; the lowest was 29°·2 on the 24th.
The range ,, was 23°·5.
The mean ,, of all the highest daily readings was 46°·7, being 1°·5 *higher* than the average of the preceding 24 years.
The mean ,, of all the lowest daily readings was 38°·1, being 2°·5 *higher* than the average of the preceding 24 years.
The mean daily range was 8°·6, being 1°·0 *less* than the average of the preceding 24 years.
The mean for the month was 42°·7, being 2°·4 *higher* than the average of the preceding 24 years.

MONTH and DAY, 1865.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Dec. 1	w N	w : ss,v,g.-cur,sps : w	10, cu.-s, oc.-r	10, cu.-s, ci.-s, ci.-cu, oc.-r : 10, ci, cu, cu.-s, sl.-r
2	m	w	6, ci, ci.-s	6, ci, ci.-cu, ci.-s, v : vv, m
3	o	w	10, sl.-r	5, ci, ci.-cu, cu.-s, v, sl.-r : v, ci, ci.-cu
4	w	w	10	9, ci, ci.-s : 10, sqs, r. w, cu.-s
5			10, s, ci.-s, ci, sl.-r	10, s, cu.-s, ci.-s, v : 10, ci.-s : 10, ci.-s
6			10 : 10	10, sl.-r : 10, sl.-r
7			10 : 10, th.-r, glm	10, r : 10, glm : 10
8		w : w	10, glm	10, ci.-s, cu.-s : 10
9	w	o : w	10, glm	10, sl.-f, gt.-glm : 10
10	m	m : o	10, ci.-cu, cu.-s, glm	10, ci.-cu, cu.-s, ci.-s : 10, f
11	m	w : m	10 : 10, cu.-s, ci.-cu, ci.-s, h	2, ci.-cu, ci : 9, th.-cl, v, ms : 10, li.-cl
12	w	m	10 : 9, li.-cl	10, ci, ci.-cu, ci.-s : 10, ci, ci.-s, cu.-s : 5, ci, ci.-s
13	w	m	2, ci, h	2, h, ci : 10 : 10, th.-r
14	w	m : w	3, li.-cl, h, sl.-f	3, li.-cl, h : 3, ci, ci.-cu, sl.-f : 0, ms
15	o	w : o	9, ci, ci.-cu, ci.-s	10, ci,-cu, cu.-s, ci : s, v : 10, li.-cl, h
16	m	w : o	10, sl.-f	10, li.-cl, h : 10, th.-cl, h, glm : 10
17	o	w	10, f, li.-cl	10, f : 10, f
18	w	m	10, li.-cl, ci, ci.-cu, sl.-f	10, ci, ci.-s, sl.-f : 7, li.-cl, ci : 10, f
19	w	m : w	8, ci, ci.-s, ci.-cu, cu.-s	10, ci, ci.-s, v : 10, ci.-s, v
20	w	w	10, sl.-r	6, ci.-s, cu.-s, sc, v : 0, m : 10, sl.-r, f
21	w	o : w : o	0	10, s, ci.-s : 8, s, cu.-s, ci.-s : 10, li.-cl
22	w	o : w : o	10, s, ci.-s	10, th.-cl : 10, ci.-s
23	w	w	10 : 10, ci, ci.-cu	10 : 10
24	w	w : m	10 : 10, f	10, sl.-f : 10, f
25	o	w	10	10 : 8, th.-cl
26	o	w	10, sc	10, sc : v, h, sc, th.-r : 8, ci, ci.-cu, sc, h, lu.-co
27	m	m	6, li.-cl, h, f	6, li.-cl, ci, sl.-f : v, th.-cl, ci, ci.-cu : 10, th.-cl, sl.-f
28	o	o	10, r : 10, sc, s, v	10, v, sc : 4, ci, ci.-cu, oc.-r : 10, th.-r, w
29			10, r, w : v, h.-shs, w, sc	vv, c.-r, sc, st.-w : 10, c.-r, fr.-sqs, w
30			0, ci	0 : 0 : 1, ci, ci.-cu, lu.-ha
31	•		10, fr.-sqs, r, st.-w	10, oc.-shs, st.-w : 10, oc.-shs

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 49°·4 on the 7th; and the lowest was 30°·4 on the 24th.

The mean „ was 39°·4, being 2°·4 *higher* than the average of the preceding 24 years.

Elastic Force of Vapour.—The mean for the month was 0$^{\text{in}}$·241, being 0$^{\text{in}}$·019 *greater* than the average of the preceding 24 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 2$^{\text{grs}}$·8, being 0$^{\text{grs}}$·2 *greater* than the average of the preceding 24 years.

Degree of Humidity.—The mean for the month was 88 (that of Saturation being represented by 100), being *the same as* the average of the preceding 24 years.

Weight of a Cubic Foot of Air.—The mean for the month was 554 grains, being 2 grains *greater* than the average of the preceding 24 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 8·3.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·8.

WIND.

The proportions were of N. 5, S. 11, W. 8, E. 3, and Calm 4. The greatest pressure in the month was 22$^{\text{lbs}}$·5 on the square foot on the 29th and 31st.

RAIN.

Fell on 10 days in the month, amounting to 0$^{\text{in}}$·87, as measured in the simple cylinder gauge partly sunk below the ground; being 1$^{\text{in}}$·02 *less* than the average fall in the preceding 50 years.

ELECTRICITY.—The Electrical apparatus was not in action from December 5 to 7, and December 29 to 31.

MAXIMA AND MINIMA READINGS OF THE BAROMETER.

The following table contains the highest and lowest readings of the Barometer, reduced to 32° Fahrenheit, extracted from the photographic records. The readings are accurate; but the times are liable to great uncertainty, as the barometer frequently remains at its highest or lowest point through several hours. The time given is the middle of the stationary period. Where the symbol : follows the time, it denote that the quicksilver has been sensibly stationary through a period of more than one hour.

MAXIMA.			MINIMA.			MAXIMA.			MINIMA.		
	Approximate Mean Solar Time, 1865.	Reading.		Approximate Mean Solar Time, 1865.	Reading.		Approximate Mean Solar Time, 1865.	Reading.		Approximate Mean Solar Time, 1865.	Reading.
	d h m	in.		d h m	in.		d h m	in.		d h m	in.
January	1. 9. 30:	29·860	January	2. 17. 20:	29·235	April	20. 10. 40:	30·061	April	21. 5. 40:	29·928
	4. 22. 15:	29·962		5. 14. 45:	29·560		23. 21. 50:	30·126		28. 3. 10	29·776
	6. 22. 40:	30·207		8. 14. 30:	29·534		28. 21. 15	29·938	May	3. 10. 35:	29·642
	10. 21. 15	29·718		12. 16. 5:	28·842	May	3. 22. 20	29·737		5. 1. 45	29·512
	13. 2. 10	29·026		13. 23. 55	28·390		6. 10. 25:	29·906		7. 1. 0	29·796
	14. 22. 30	28·979		16. 2. 55	28·809		7. 1. 42	29·839		7. 2. 7	29·711
	20. 22. 20:	29·517		21. 19. 10:	29·415		7. 4. 47	29·834		7. 5. 15	29·699
	22. 22. 45:	29·706		23. 17. 40	29·414		7. 9. 22	29·833		9. 23. 50	29·343
	24. 22. 15:	29·555		26. 20. 25:	28·841		12. 21. 20	29·876		15. 3. 40	29·446
	28. 10. 30:	29·865	February	0. 18. 20:	28·718		19. 19. 45	30·225		22. 4. 55	29·771
February	6. 0. 0	29·827		7. 3. 5	29·665		22. 21. 45	29·858		23. 3. 43	29·775
	10. 0. 0	30·432		16. 13. 45:	28·916		24. 21. 35:	29·984		27. 15. 45	29·676
	17. 0. 35	29·280		17. 6. 5:	29·190		28. 10. 35:	29·851		29. 16. 40	29·487
	17. 23. 35	29·551		19. 2. 50	29·007		30. 19. 36	29·807	June	1. 17. 25:	29·428
	20. 21. 55	30·266		21. 11. 50:	30·050	June	7. 21. 0	30·358		10. 6. 15:	29·936
	22. 23. 20	30·185		24. 1. 45	29·425		12. 11. 50:	30·292		23. 7. 45:	29·930
	25. 8. 0:	30·078		26. 6. 10:	29·712		24. 11. 20:	30·023		25. 16. 40:	29·874
	26. 23. 0	30·065		28. 14. 0:	29·360		26. 22. 30	30·070		29. 21. 0	29·120
March	3. 12. 0:	30·204	March	5. 21. 55	29·042	July	2. 21. 0	29·957	July	4. 2. 0	29·806
	9. 13. 30:	29·840		10. 17. 25:	29·305		5. 9. 45:	29·925		6. 16. 35:	29·542
	12. 8. 40	29·930		13. 12. 25:	29·596		7. 9. 30	29·685		8. 3. 25	29·625
	15. 15. 0:	29·907		17. 3. 5	29·758		8. 22. 30	29·774		11. 4. 25:	29·526
	17. 23. 55:	29·875		19. 7. 45	29·615		12. 10. 30:	29·902		14. 23. 25	29·689
	20. 22. 30:	29·900		25. 21. 30:	29·155		15. 23. 0	29·900		19. 7. 0:	29·630
	30. 10. 20:	30·135	April	2. 17. 45:	29·680		20. 10. 25:	29·738		21. 19. 45:	29·566
April	5. 21. 10	30·170		8. 4. 55:	29·932		25. 21. 0	30·202		27. 7. 20	30·005
	10. 15. 10:	30·145		13. 2. 40	29·775		27. 18. 15	30·108		31. 14. 50:	29·416
	15. 9. 25	30·057		17. 17. 50:	29·735	August	1. 2. 43	29·639	August	2. 0. 50	29·480

MAXIMA AND MINIMA READINGS OF THE BAROMETER—*concluded.*

MAXIMA.			MINIMA.			MAXIMA.			MINIMA.		
Approximate Mean Solar Time, 1865.		Reading.	Approximate Mean Solar Time, 1865.		Reading.	Approximate Mean Solar Time, 1865.		Reading.	Approximate Mean Solar Time, 1865.		Reading.
	d h m	in.		d h m	in.		d h m	in.		d h m	in.
August	4. 21. 25	29·948	August	7. 4. 10:	29·643	October	25. 12. 40	29·745	October	27. 2. 0	28·824
	8. 10. 5:	29·834		11. 2. 50	29·410		28. 10. 5:	29·705		29. 3. 25	28·964
	11. 21. 10	29·699		12. 4. 30	29·536		29. 11. 52	29·173		30. 0. 30	28·984
	13. 9. 5	29·669		13. 21. 25	29·575	November	1. 22. 0	29·877	November	2. 10. 45:	29·814
	14. 11. 0:	29·674		15. 5. 35:	29·385		4. 21. 35:	30·073		8. 15. 40	29·782
	16. 22. 0:	29·696		17. 14. 30	29·605		12. 10. 35:	30·325		14. 4. 36	29·922
	18. 21. 30	29·816		23. 2. 52	29·300		15. 11. 35:	30·229		17. 2. 45	29·537
	26. 10. 0:	30·139		28. 5. 10	29·657		18. 0. 0	30·024		21. 21. 54	28·794
	30. 9. 12	30·172		31. 16. 20	29·920		23. 2. 30	29·362		23. 14. 8	29·119
September	2. 21. 45	30·073	September	4. 6. 0	29·941		24. 11. 5:	29·454		25. 13. 23	28·908
	5. 10. 55:	30·024		8. 4. 5:	29·750		26. 22. 45:	29·609		28. 3. 50:	28·988
	11. 22. 15	30·290		16. 3. 7	29·966		30. 21. 50	29·912	December	4. 4. 40	29·126
	18. 11. 45:	30·295		20. 13. 25:	29·876	December	8. 7. 50:	30·404		9. 1. 30	30·340
	22. 21. 35:	30·323		27. 5. 15:	29·926		10. 22. 40:	30·543		14. 2. 38	30·276
	28. 11. 15:	30·087	October	1. 16. 10:	29·766		15. 10. 30:	30·610		19. 18. 15:	30·031
October	3. 9. 30:	30·081		10. 19. 5:	29·082		24. 22. 35	30·297		26. 2. 25	30·040
	15. 10. 45:	29·873		18. 15. 30	28·865		26. 21. 35	30·254		29. 7. 15	29·005
	20. 20. 30:	29·505		22. 2. 30	29·201		30. 7. 26	29·716		31. 1. 5	29·300
	23. 10. 35:	29·573		24. 18. 25	29·250		31. 6. 45	29·418		31. 15. 15	29·124

ABSOLUTE MAXIMA AND MINIMA READINGS OF THE BAROMETER, for each Month in the Year 1865.
[Extracted from the preceding Table.]

1865, MONTH.	Readings of the Barometer.		Range of Reading in each Month.
	Maxima.	Minima.	
	in.	in.	in.
January	30·207	28·390	1·817
February	30·432	28·718	1·714
March	30·204	29·042	1·162
April	30·170	29·680	0·490
May	30·225	29·343	0·882
June	30·358	29·120	1·238
July	30·202	29·416	0·786
August	30·172	29·300	0·872
September	30·323	29·750	0·573
October	30·081	28·824	1·257
November	30·325	28·794	1·531
December	30·610	29·005	1·605

The highest reading in the year was 30^{in}·610 in the month of December. The lowest reading in the year was 28^{in}·390 in the month of January.
The range of reading in the year was 2^{in}·220.

MONTHLY MEANS of RESULTS for METEOROLOGICAL ELEMENTS at the ROYAL OBSERVATORY, GREENWICH, in the Year 1865.

1865, MONTH.	Mean Reading of the Barometer.	TEMPERATURE OF THE AIR.							Mean Temperature of Dew Point.	Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight required to saturate a Cubic Foot of Air.
		Highest.	Lowest.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean Temperature.				
	in.	°	°	°	°	°	°	°	°	in.	gr.	gr.
January ..	29·404	50·2	19·6	30·6	40·9	31·8	9·1	36·3	32·4	0·184	2·1	0·4
February..	29·722	52·7	15·5	37·2	42·2	32·2	10·0	36·6	31·7	0·179	2·1	0·5
March	29·722	58·7	23·7	35·0	44·0	31·1	12·9	36·6	30·5	0·170	2·0	0·6
April	29·954	81·5	31·9	49·6	66·3	41·5	24·8	52·3	44·0	0·288	3·3	1·1
May	29·769	78·5	31·4	47·1	67·9	46·3	21·6	56·1	47·5	0·329	3·6	1·4
June	30·031	87·6	41·2	46·4	73·6	49·9	23·7	60·2	50·4	0·366	4·1	1·7
July......	29·797	85·0	47·0	38·0	75·7	54·3	21·4	63·8	54·2	0·421	4·7	1·9
August ...	29·711	78·0	43·2	34·8	70·9	51·5	19·4	59·9	53·4	0·409	4·5	1·2
September.	30·071	86·0	40·2	45·8	76·4	53·6	22·8	63·9	55·9	0·447	5·0	1·6
October ...	29·440	71·7	33·5	38·2	60·0	43·7	16·3	50·9	47·0	0·323	3·6	0·6
November .	29·720	56·4	31·0	25·4	50·8	38·7	12·1	44·8	41·4	0·261	3·0	0·4
December .	30·055	52·7	29·2	23·5	46·7	38·1	8·6	42·7	39·4	0·241	2·8	0·4
Means	29·783	69·9	32·3	37·6	59·6	42·7	16·9	50·3	44·0	0·302	3·4	1·0

1865, MONTH.	Mean Degree of Humidity. (Sat. = 100.)	Mean Weight of a Cubic Foot of Air.	Mean Amount of Cloud. 0 – 10	RAIN.			WIND.											
				Number of Rainy Days.	Amount collected on the Ground.		From Osler's Anemometer.											From Robinson's Anemometer.
							Number of Days for Mean Direction of the Wind referred to different Points of Azimuth.								Number of Calm Days and Days on which the Pressure of the Wind was less than ¼ lb. on the Sq. Foot.	Mean Daily Pressure in lbs. on Square Foot.		
					Gauge read Daily.	Gauge read Monthly.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			Mean Daily Horizontal Movement of Wind in Miles.
		gr.			in.	in.											
January........	86	550	7·2	16	3·32	3·34	3	3	1	1	3	10	7	1	2	0·40	271
February.......	83	555	7·8	19	1·75	1·90	3	4	2	1	2	8	3	2	3	0·43	275
March	79	555	7·7	10	0·85	0·88	10	2	3	2	1	3	3	4	3	0·44	270
April..........	73	542	4·2	7	0·40	0·38	4	3	4	3	1	6	1	1	7	0·07	169
May............	73	534	6·4	13	4·37	4·20	1	2	1	1	2	17	2	1	4	0·18	211
June...........	70	534	5·9	5	2·45	2·20	6	3	2	4	0	3	3	3	6	0·04	181
July...........	72	527	6·5	11	2·27	2·18	2	1	0	1	1	11	7	3	5	0·21	212
August	80	529	7·0	17	3·97	3·96	2	1	0	1	1	10	7	3	6	0·16	210
September......	76	531	3·2	1	0·16	0·16	1	4	2	3	1	6	4	1	8	0·01	157
October........	87	533	6·2	19	5·90	6·00	2	2	2	3	3	5	5	1	8	0·34	227
November......	88	546	6·2	18	2·39	2·45	3	3	1	4	5	7	3	1	3	0·45	265
December	88	554	8·3	10	0·87	0·90	3	2	0	4	4	11	2	1	4	0·42	221
Means	80	541	6·4	Sum 146	Sum 28·70	Sum 28·55	Sum 40	Sum 30	Sum 18	Sum 28	Sum 24	Sum 97	Sum 47	Sum 22	Sum 59	..	..

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS

WITH THE

ACTINOMETER.

1865.

OBSERVATIONS WITH THE ACTINOMETER.

Day 1865.	Greenwich Mean Solar Time of the Initial Reading.	Instrument exposed to the Sun's Rays, or in the Shade.	Readings of the Graduated Scale. Initial A.	Readings of the Graduated Scale. Terminal B.	Change in One Minute, B-A.	Apparent effect of the Sun's Radiation in parts of the Scale.	Mean Result of each Group in parts of the Scale.	Greenwich Mean Solar Time corresponding to the Mean of each Group.	Altitude of the Sun.	Thermometer in the fluid of the Actinometer.	Blackened Bulb Thermometer placed on Grass.	General Remarks.	Observer.
	h m s		div	div	div	d.v.	d v.	h m s	°	°	°		
Feb. 9	1. 22. 0	Sun	6·3	12·0	5·7	..				53·5	45·4 43·5	Dense clouds.	N
	23. 30	Shade	12·7	13·5	0·8	9·7	14·7	1. 27. 0	15	..	42·2	"	"
	25. 0	Sun	13·8	29·2	15·4	15·1				..	43·0 46·1	Thin cloud 10$^{secs.}$, Sun free from cloud 50$^{secs.}$.	"
	26. 30	Shade	29·9	29·7	−0·2	17·3				..	44·8	A little sleet falling.	"
	28. 0	Sun	29·2	48·0	18·8	19·4				..	44·6 48·5	Clear about the Sun, dense clouds elsewhere.	"
	29. 30	Shade	48·0	47·0	−1·0	11·8				..	..	" " "	"
	1. 31. 0	Sun	46·8	49·6	2·8	..				53·7	44·0 41·5	Cloudy about the Sun.	N
Feb. 9	2. 29. 0	Sun	3·6	19·0	15·4	..				48·8	44·6 45·8	Clear about the Sun.	N
	30. 30	Shade	18·6	16·0	−2·6	17·8	16·7	2. 34. 0	9	..	..	"	"
	32. 0	Sun	15·0	30·0	15·0	17·6				..	45·5 46·4	"	"
	33. 30	Shade	29·5	27·0	−2·5	16·4				..	..	"	"
	35. 0	Sun	25·6	38·3	12·7	15·1				..	48·4 48·7	"	"
	36. 30	Shade	37·8	35·5	−2·3	16·6				..	..	"	"
	2. 38. 0	Sun	34·4	50·4	16·0	..				50·0	50·0 48·0	Light clouds were prevalent after this.	N
Feb. 11	2. 39. 0	Sun	8·0	23·8	15·8	..				48·0	33·0	Clear about the Sun. The ground is covered with snow.	N
	40. 30	Shade	25·1	26·1	1·0	14·7	14·0	2. 44. 0	8	..	32·8	"	"
	42. 0	Sun	26·2	41·8	15·6	15·0				..	33·7	"	"
	43. 30	Shade	42·5	42·8	0·3	14·0				..	..	"	"
	45. 0	Sun	42·8	55·8	13·0	12·8				..	33·0 33·4	"	"
	46. 30	Shade	56·1	56·1	0·0	13·6				..	..	"	"
	2. 48. 0	Sun	55·8	70·0	14·2	..				48·2	34·0 34·0	"	N
Feb. 14	22. 50. 0	Sun	5·2	9·2	4·0	..				17·0	34·6 34·1	Cloudless, slight haze. Bright Sun.	N
	51. 30	Shade	10·0	10·8	0·8	3·4	3·7	22. 58. 0	20	..	..	"	"
	53. 0	Sun	11·0	15·5	4·5	3·5				..	34·0 33·8	"	"
	54. 30	Shade	16·1	17·3	1·2	3·2				18·4	..	"	"
	56. 0	Sun	17·8	22·0	4·2	3·1				..	33·0 33·0	"	"
	57. 30	Shade	23·0	24·0	1·0	4·0				..	..	"	"
	22. 59. 0	Sun	24·8	30·5	5·7	4·4				..	34·0 34·0	"	"
	23. 0. 30	Shade	31·2	32·8	1·6	3·9				20·1	..	Haze and thin clouds in S.	"
	2. 0	Sun	33·6	39·0	5·4	3·7				..	31·5 31·5	"	"
	3. 30	Shade	40·0	41·9	1·9	3·8				21·2	..	"	"
	5. 0	Sun	42·8	48·8	6·0	4·0				..	32·0 32·4	"	"
	6. 30	Shade	50·0	52·0	2·0	4·6	5·4	23. 9. 15	20	22·0	..	"	"
	8. 0	Sun	52·8	60·0	7·2	5·3				..	32·4 33·0	Bright Sun.	"
	9. 30	Shade	61·4	63·2	1·8	6·4				23·0	..	"	"
	23. 11. 0	Sun	64·2	73·5	9·3	..				24·0	35·6 35·6	"	N

In every observation, whether in the Sun's rays or in the shade, the terminal reading was taken exactly one minute after the initial reading.

The "Apparent Effect of the Sun's Radiation" is found by comparing each change (whether in the Sun's rays or in the shade) with the mean of that which immediately precedes and that which immediately follows it.

The initials N. and A. H. are those of Mr. W. C. Nash and Mr. A. Harding.

OBSERVATIONS WITH THE ACTINOMETER—*continued.*

Day, 1865.	Greenwich Mean Solar Time of the Initial Reading.	Instrument exposed to the Sun's Rays, or in the Shade.	Readings of the Graduated Scale. Initial A.	Readings of the Graduated Scale. Terminal B.	Change in one Minute, B–A.	Apparent effect of the Sun's Radiation in parts of the Scale.	Mean Result of each Group in parts of the Scale.	Greenwich Mean Solar Time corresponding to the Mean of each Group.	Altitude of the Sun.	Thermometer in the fluid of the Actinometer.	Blackened Bulb Thermometer placed on Grass.	General Remarks.	Observer.
	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
Feb. 15	0. 32. 0	Sun	1·6	14·4	12·8	..				29·8	37·8	Cloudless; bright warm Sun.	N
											39·0		
	33. 30	Shade	15·2	15·9	0·7	12·5	13·1	0. 37. 0	20	..	..	,,	..
	35. 0	Sun	16·0	29·7	13·7	12·8				..	41·3	,,	..
											41·8		
	36. 30	Shade	30·5	31·5	1·0	13·0				..	..	,,	..
	38. 0	Sun	31·8	46·0	14·2	13·4				..	42·7	,,	..
	39. 30	Shade	47·7	48·3	0·6	13·7				..	..	,,	..
	0. 41. 0	Sun	49·2	63·6	14·4	..				32·7	44·1	,,	N
											44·0		
Mar. 21	1. 56. 0	Sun	6·6	27·6	21·0	..				38·0	58·3	Cloudless.	N
											56·3		
	57. 30	Shade	30·0	32·8	2·8	19·0	19·8	2. 1. 0	31	..	..	,,	..
	1. 59. 0	Sun	33·8	56·4	22·6	20·0				..	55·8	,,	..
											55·3		
	2. 0. 30	Shade	58·7	61·0	2·3	20·2				..	..	,,	..
	2. 0	Sun	62·2	84·6	22·4	19·7				..	54·0	,,	..
	3. 30	Shade	5·2	8·4	3·2	20·2				41·0	58·4	,,	..
	2. 5. 0	Sun	9·6	34·1	24·5	..				42·0	59·6	,,	N
											61·3		
Mar. 30	2. 4. 0	Sun	6·7	24·2	17·5	..				37·7	59·7	Light clouds.	N
	5. 30	Shade	27·0	32·0	5·0	8·2	4·6	2. 9. 0	32	..	63·0	Clouds passing over the Sun.	..
	7. 0	Sun	33·0	41·8	8·8	4·6				..	59·1	Denser clouds.	..
	8. 30	Shade	43·5	47·0	3·5	4·1				..	57·8	,,	..
	10. 0	Sun	49·2	55·6	6·4	3·2				..	55·6	,,	..
	11. 30	Shade	56·2	59·2	3·0	2·9				..	53·2	,,	..
	2. 13. 0	Sun	60·8	66·1	5·3	.				40·0	52·2	,,	N
											51·0		
April 4	0. 42. 0	Sun	4·0	29·3	25·3	..				44·0	74·5	Light clouds and haze.	N
	43. 30	Shade	34·7	39·3	4·6	20·1	19·8	0. 47. 0	40	..	72·8	,,	..
	45. 0	Sun	41·0	65·2	24·2	19·4				..	73·0	,,	..
	46. 30	Shade	68·8	73·8	5·0	19·4				..	74·2	,,	,,
	48. 0	Sun	1·5	26·1	24·6	19·7				..	74·2	,,	,,
	49. 30	Shade	30·0	34·8	4·8	20·0				..	76·1	,,	,,
	51. 0	Sun	37·1	62·1	25·0	20·1				..	76·5	,,	..
	52. 30	Shade	65·1	70·0	4·9	17·3	14·9	0. 55. 15	40	..	74·8	,,	..
	54. 0	Sun	4·3	23·6	19·3	14·5				..	74·0	,,	..
	55. 30	Shade	28·0	32·6	4·6	13·0				..	..	Denser clouds.	..
	0. 57. 0	Sun	35·2	51·0	15·8	..				51·3	71·7	,,	N
											70·2		
April 8	1. 21. 0	Sun	6·8	50·2	43·4	..				73·0	83·0	Clear.	N
	22. 30	Shade	54·0	59·0	5·0	37·9	37·2	1. 29. 0	38	..	92·0	,,	.
	24. 0	Sun	2·2	44·6	42·4	38·0				..	93·2	,,	.
	25. 30	Shade	47·4	51·2	3·8	36·8				..	91·7	,,	,,
	27. 0	Sun	53·2	92·0	38·8	35·0				..	90·6	,,	.
	28. 30	Shade	5·0	8·8	3·8	36·0				77·7	92·0	,,	..
	30. 0	Sun	10·0	50·8	40·8	37·1				..	92·9	,,	.
	31. 30	Shade	53·2	56·8	3·6	37·6				..	94·0	,,	.
	33. 0	Sun	0·4	42·1	41·7	38·5				..	90·4	Clear; slight breeze.	..
	34. 30	Shade	44·1	46·8	2·7	37·7				..	90·1	,,	.
	1. 36. 0	Sun	47·8	87·0	39·2	..				81·0	90·6	,,	N
											89·0		

In every observation, whether in the Sun's rays or in the shade, the terminal reading was taken exactly one minute after the initial reading.
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OBSERVATIONS WITH THE ACTINOMETER—*continued.*

Day, 1865.	Greenwich Mean Solar Time of the Initial Reading.	Instrument exposed to the Sun's Rays, or in the Shade.	Readings of the Graduated Scale. Initial A.	Readings of the Graduated Scale. Terminal B.	Change in one Minute, B − A.	Apparent effect of the Sun's Radiation in parts of the Scale.	Mean Result of each Group in parts of the Scale.	Greenwich Mean Solar Time corresponding to the Mean of each Group.	Altitude of the Sun.	Thermometer in the fluid of the Actinometer.	Blackened Bulb Thermometer placed on Grass.	General Remarks.	Observer.
	h m s		div	div	div	div	div.	h m s	°	°	°		
April 10	1. 25. 0	Sun	5·5	32·9	27·4	. .				60·4	80·0	Very light clouds here and there.	N
	26. 30	Shade	36·2	41·5	5·3	20·5				. .	82·7	,,	,,
	28. 0	Sun	43·8	68·1	24·3	19·1				. .	83·2	,,	,,
	29. 30	Shade	71·0	76·0	5·0	19·6	20·0	1. 30. 0	38	. .	81·3	,,	,,
	31. 0	Sun	3·0	27·9	24·9	19·9				. .	81·1	,,	,,
	32. 30	Shade	31·1	36·1	5·0	20·8				. .	81·4	,,	,,
	1. 34. 0	Sun	38·7	65·4	26·7	. .				64·0	82·0	,,	N
											83·4		
April 10	1. 37. 0	Sun	4·2	36·2	32·0	. .				64·0	84·0	A little cloud about the Sun.	AH
											82·7		
	38. 30	Shade	40·1	46·2	6·1	24·8				. .	. .	,,	,,
	40. 0	Sun	49·3	79·2	29·9	24·1				. .	. .	,,	,,
											83·9		
	41. 30	Shade	82·9	88·4	5·5	24·4				67·8	84·0	,,	,,
											83·9		
	43. 0	Sun	4·0	33·8	29·8	24·0				. .	84·1	,,	,,
											84·6		
	44. 30	Shade	37·6	43·7	6·1	24·4	24·9	1. 45. 0	36	. .	85·9	Sun nearly free from clouds.	,,
											86·0		
	46. 0	Sun	46·7	77·8	31·1	25·0				. .	. .	,,	,,
											85·2		
	47. 30	Shade	81·8	87·9	6·1	25·4				70·6	. .	,,	,,
	49. 0	Sun	8·0	40·0	32·0	25·9				. .	84·7	,,	,,
											84·5		
	50. 30	Shade	44·0	50·1	6·1	26·1				. .	. .	Clear about the Sun.	,,
	1. 52. 0	Sun	53·1	85·6	32·5	. .				71·9	84·3	,,	AH
											85·5		
April 11	21. 27. 0	Sun	1·0	23·4	22·4	. .				42·2	79·6	Clear.	AH
	28. 30	Shade	26·8	31·9	5·1	18·3				. .	76·3	,,	,,
	30. 0	Sun	34·7	59·2	24·5	19·3				. .	77·5	,,	,,
	31. 30	Shade	62·7	68·1	5·4	19·8				44·3	77·6	,,	,,
	33. 0	Sun	2·0	27·9	25·9	20·1				. .	78·7	,,	,,
	34. 30	Shade	32·0	38·2	6·2	20·7	20·8	21. 35. 0	36	. .	80·0	,,	,,
											81·2		
	36. 0	Sun	41·3	69·2	27·9	21·3				. .	81·4	,,	,,
	37. 30	Shade	73·4	80·3	6·9	22·0				48·6	81·0	,,	,,
	39. 0	Sun	3·7	33·6	29·9	22·8				. .	80·6	,,	,,
	40. 30	Shade	38·2	45·4	7·2	22·8				. .	81·5	,,	,,
											82·0		
	21. 42. 0	Sun	49·2	79·2	30·0	. .				51·6	82·5	,,	AH
											82·7		
April 11	22. 48. 0	Sun	1·4	38·0	36·6	. .				70·3	92·0	Clear.	AH
											93·4		
	49. 30	Shade	41·3	43·4	2·1	34·1				. .	94·2	,,	,,
	51. 0	Sun	45·1	80·8	35·7	33·2				. .	93·8	,,	,,
											94·2		
	52. 30	Shade	83·1	86·1	3·0	33·0				75·0	94·1	,,	,,
	54. 0	Sun	2·6	39·0	36·4	33·2				. .	94·0	,,	,,
											91·6		
	55. 30	Shade	41·5	45·0	3·5	33·7	33·7	22. 56. 0	42	. .	90·4	,,	,,
	57. 0	Sun	46·3	84·2	37·9	34·6				.	90·6	,,	,,
											87·1		
	22. 58. 30	Shade	86·6	89·7	3·1	33·9				. .	86·6	,,	,,
	23. 0. 0	Sun	11·6	47·8	36·2	33·4				. .	85·0	,,	,,
	1. 30	Shade	50·0	52·6	2·6	34·3				. .	84·8	,,	,,
	23. 3. 0	Sun	54·1	91·7	37·6	. .				78·4	86·3	,,	AH

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
April 12	2. 21. 0	Sun	5·7	30·0	24·3	..				70·0	72·6	Light clouds about the Sun.	AH
	22. 30	Shade	30·5	30·2	−0·3	25·1	25·9	2. 29. 0	33	..	73·1	,,	,,
	24. 0	Sun	30·2	55·4	25·2	25·0				..	76·2	,,	,,
	25. 30	Shade	56·2	57·0	0·8	25·2				..	76·6	,,	,,
	27. 0	Sun	57·4	84·1	26·7	25·6				..	77·2		,,
	28. 30	Shade	85·7	87·0	1·3	26·2				..	76·7	,,	,,
	30. 0	Sun	1·0	29·2	28·2	26·5				..	76·4	,,	,,
	31. 30	Shade	30·7	32·9	2·2	26·3				..	76·4	,,	,,
	33. 0	Sun	33·7	62·5	28·8	26·5				..	76·2	,,	,,
	34. 30	Shade	64·1	66·4	2·3	26·8				..	77·1	,,	,,
	2. 36. 0	Sun	2·0	31·5	29·5	..				75·8	77·3	,,	AH
April 20	23. 12. 0	Sun	2·8	35·4	32·6	..				49·7	89·4	Clear about the Sun.	AH
	13. 30	Shade	39·3	46·1	6·8	26·3	28·6	23. 21. 30	47	..	90·4	,,	,,
	15. 0	Sun	49·7	83·3	33·6	26·8				..	89·9	,,	,,
	16. 30	Shade	87·5	94·4	6·9	28·0				53·8	90·0	,,	,,
	18. 0	Sun	0·1	36·2	36·1	28·1				..	90·8	,,	,,
	19. 30	Shade	41·7	50·7	9·0	28·0				..	91·3	,,	,,
	21. 0	Sun	2·2	40·0	37·8	28·5				..	92·1	,,	,,
											93·3		
	22. 30	Shade	45·9	55·6	9·7	28·5				57·7	93·4	,,	,,
	24. 0	Sun	4·0	42·6	38·6	29·1				..	92·2	,,	,,
											91·8		
	25. 30	Shade	48·2	57·4	9·2	30·1				..	92·0	,,	,,
	27. 0	Sun	3·1	43·1	40·0	30·6				..	92·4	,,	,,
	28. 30	Shade	48·9	58·4	9·5	30·8				60·0	93·4	,,	,,
											93·2		
	23. 30. 0	Sun	4·2	44·8	40·6	..				62·7	92·6	,,	AH
											93·1		
April 21	23. 31. 0	Sun	2·2	38·6	36·4	..				63·8	97·8	Cloudless.	AH
											96·7		
	32. 30	Shade	41·6	45·9	4·3	33·4	34·3	23. 40. 30	48	..	96·9	,,	,,
											98·0		
	34. 0	Sun	2·2	41·2	39·0	34·0				..	98·0	,,	,,
	35. 30	Shade	44·9	50·7	5·8	33·8				..	98·6	,,	,,
	37. 0	Sun	8·0	48·3	40·3	34·3				..	100·2	,,	,,
	38. 30	Shade	52·1	58·2	6·1	34·4				..	101·0	,,	,,
											101·0		
	40. 0	Sun	3·5	44·1	40·6	34·1				..	100·6	,,	,,
	41. 30	Shade	48·2	55·0	6·8	34·0				..	99·0	,,	,,
											99·9		
	43. 0	Sun	18·7	59·8	41·1	33·9				..	100·2	,,	,,
											99·6		
	44. 30	Shade	64·0	71·6	7·6	34·4				72·0	100·4	,,	,,
	46. 0	Sun	7·7	50·7	43·0	35·3				..	102·6	,,	,,
											103·0		
	47. 30	Shade	55·4	63·2	7·8	35·6				73·9	102·3	,,	,,
	23. 49. 0	Sun	4·0	47·7	43·7	..				74·6	100·0	,,	A H
											100·6		

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	h m s		div	div	div	d v	div.	h m s	°	°	°		
April 22	1. 51. 0	Sun	0·5	38·2	37·7	..				68·0	95·5 97·0	Cloudless.	AH
	52. 30	Shade	39·2	39·5	0·3	38·6				..	97·0 97·5	„	„
	54. 0	Sun	2·3	42·3	40·0	39·2				..	97·7 99·0	„	„
	55. 30	Shade	43·5	44·8	1·3	39·1				..	99·7 99·5	„	„
	57. 0	Sun	1·4	42·2	40·8	39·5	39·3	1. 59. 0	40	..	99·0 99·2	„	„
	1. 58. 30	Shade	43·7	44·9	1·2	40·2				..	98·8 98·5	„	„
	2. 0. 0	Sun	5·2	47·2	42·0	40·1				..	99·4	„	„
	1. 30	Shade	50·0	52·6	2·6	39·1				..	99·0 98·1	„	„
	3. 0	Sun	0·4	41·8	41·4	38·5				..	98·0	„	„
	4. 30	Shade	44·0	47·2	3·2	39·0				..	99·2 98·5	„	„
	2. 6. 0	Sun	10·0	53·1	43·1	..				84·0	97·5 97·0	„	AH
April 24	0. 43. 0	Sun	2·3	39·0	36·7	..				56·2	96·2	Cloudless.	AH
	44. 30	Shade	43·1	49·3	6·2	31·3				59·5	96·9	„	„
	46. 0	Sun	7·0	45·2	38·2	31·8				..	99·6 101·0	„	„
	47. 30	Shade	49·1	55·8	6·7	32·1				60·6	101·2 101·6	„	„
	49. 0	Sun	3·1	42·4	39·3	32·4				..	103·0 102·1	„	„
	50. 30	Shade	46·7	53·8	7·1	33·0	32·7	0. 51. 0	46	.. 62·0	100·3 99·0	„	„
	52. 0	Sun	6·3	47·2	40·9	33·5				..	97·7 98·5	„	„
	53. 30	Shade	52·0	59·6	7·6	33·3				63·9	99·4 101·6	„	„
	55. 0	Sun	3·8	44·7	40·9	32·8				..	100·2 100·6	„	„
	56. 30	Shade	50·3	58·9	8·6	33·9				..	98·8 99·3	„	„
	0. 58. 0	Sun	5·5	49·6	44·1	..				66·6	99·2 99·4	„	AH
April 27	1. 20. 0	Sun	9·1	44·7	35·6	..				66·3	101·8 103·0	Light clouds and haze.	AH
	21. 30	Shade	48·0	53·1	5·1	31·5				..	103·0 102·2	„	„
	23. 0	Sun	1·7	39·2	37·5	32·3				..	102·0 102·6	„	„
	24. 30	Shade	42·3	47·6	5·3	33·1				69·6	103·2 103·0	„	„
	26. 0	Sun	6·2	45·6	39·4	33·8	33·2	1. 25. 45	44	..	103·0 103·5	„	„
	27. 30	Shade	49·2	55·1	5·9	33·9				..	104·3 105·6	„	„
	29. 0	Sun	5·2	45·5	40·3	33·8				..	105·4 103·8	„	„
	1. 30. 30	Shade	49·6	56·6	7·0	34·3				72·8	104·5 104·5	„	AH

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
April 27 *cont.*	1. 32. 0	Sun	6·0	48·4	42·4	35·2	35·5	1. 34. 0	44	..	103·8 105·5	Light clouds and haze.	AH
	33. 30	Shade	52·9	60·2	7·3	35·7				..	106·7 107·5	,,	,,
	1. 35. 0	Sun	14·6	58·3	43·7	..				76·2	108·0 107·6	,,	AH
May 9	1. 39. 0	Sun	5·2	28·3	23·1	..				61·9	94·1 86·4	Clouds passing over the Sun.	AH
	40. 30	Shade	30·6	32·4	1·8	29·7	30·7	1. 41. 45	46	..	83·7 87·7	,,	,,
	42. 0	Sun	35·3	75·3	40·0	37·6				..	90·3 92·2	Generally clear about the Sun.	,,
	43. 30	Shade	77·7	80·8	3·1	24·8				..	86·5 81·2	,,	,,
	45. 0	Sun	2·4	18·1	15·7	12·4	14·0	1. 50. 0	45	..	78·2 79·0	Sun obscured by clouds.	,,
	46. 30	Shade	20·2	23·7	3·5	10·2				..	78·4 78·0	,,	,,
	48. 0	Sun	25·6	37·2	11·6	8·4				..	75·3 74·5	,,	,,
	49. 30	Shade	38·9	41·7	2·8	12·4				64·7	74·1 74·0	,,	,,
	51. 0	Sun	3·2	21·9	18·7	15·9				..	76·3 76·0	,,	,,
	52. 30	Shade	23·7	26·5	2·8	24·7				..	75·3 74·2	,,	,,
	1. 54. 0	Sun	27·8	64·2	36·4	..				..	75·4	Partially clear about the Sun.	AH
May 18	23. 23. 0	Sun	3·3	40·4	37·1	..				53·9	91·3 92·1	Light clouds scattered over the sky.	AH
	24. 30	Shade	44·6	51·0	6·4	30·8	31·0	23. 27. 15	45	..	93·0 94·1	,,	,,
	26. 0	Sun	1·8	39·0	37·2	31·0				..	94·0 93·6	,,	,,
	27. 30	Shade	42·8	48·7	5·9	31·4				59·6	93·8 94·0	,,	,,
	29. 0	Sun	1·3	38·7	37·4	31·0				..	94·2 93·8	,,	,,
	30. 30	Shade	42·8	49·7	6·9	30·9				..	94·0 93·2	,,	,,
	32. 0	Sun	1·0	39·2	38·2	31·5	31·9	23. 34. 0	45	61·1	93·0 93·3	,,	,,
	33. 30	Shade	42·9	49·5	6·6	31·9				.. 63·7	93·6 93·0	,,	,,
	35. 0	Sun	2·4	41·2	38·8	32·2				..	92·4 94·0	,,	,,
	36. 30	Shade	45·2	51·8	6·6	33·0	33·5	23. 39. 15	45	64·3	95·2 94·8		,,
	38. 0	Sun	1·6	42·1	40·5	33·7				66·0	94·6 94·8	,,	,,
	39. 30	Shade	46·4	53·4	7·0	33·8				..	94·3 92·4	,,	,,
	23. 41. 0	Sun	1·8	42·9	41·1	..				67·7	92·8 94·1	,,	AH

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			Initial A.	Terminal B.									
	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
May 20	3. 0. 0	Sun	0·0	33·3	33·3	. .				69·8	87·0 90·7	Cloudless.	AH
	1. 30	Shade	34·6	35·3	0·7	31·8	32·9	3. 6. 30	38	. .	92·1 94·0	,,	,,
	3. 0	Sun	35·6	67·4	31·8	30·9				. .	95·5 95·7	,,	,,
	4. 30	Shade	69·3	70·5	1·2	32·3				. .	96·5 95·7	,,	,,
	6. 0	Sun	1·0	36·2	35·2	33·6				. .	95·6 96·6	,,	,,
	7. 30	Shade	37·9	39·8	1·9	34·1				73·6	96·7 96·5	,,	,,
	9. 0	Sun	0·8	37·6	36·8	34·5				. .	95·8 95·5	,,	,,
	10. 30	Shade	39·5	42·3	2·8	33·3				. .	96·0 96·2	,,	,,
	3. 12. 0	Sun	43·4	78·8	35·4	. .				76·0	95·8 93·6	,,	A H
May 22	0. 50. 0	Sun	8·0	48·0	40·0	. .				70·0	93·0 98·4	Cloudless about the Sun; very bright.	N
	51. 30	Shade	51·7	56·3	4·6	35·6	34·8	0. 55. 0	53	. .	. .	,,	,,
	53. 0	Sun	2·6	43·0	40·4	35·5				. .	100·5	,,	,,
	54. 30	Shade	46·7	52·0	5·3	34·5				. .	100·8	,,	,,
	56. 0	Sun	54·5	93·6	39·1	33·7				. .	101·6	,,	,,
	57. 30	Shade	5·5	11·0	5·5	34·9				. .	98·6	,,	,,
	0. 59. 0	Sun	14·0	55·7	41·7	. .				74·0	97·4	,,	N
May 22	22. 7. 0	Sun	5·0	43·6	38·6	. .				68·7	94·4 96·8	Clear about the Sun.	AH
	8. 30	Shade	46·2	49·6	3·4	34·3	31·8	22. 9. 45	51	70·0	97·9 99·8	,,	,,
	10. 0	Sun	0·4	37·3	36·9	33·4				. .	100·0 96·3	Light clouds about the Sun.	,,
	11. 30	Shade	40·5	44·1	3·6	27·6				. .	93·6 94·0	,,	,,
	13. 0	Sun	0·9	26·4	25·5	21·7	19·7	22. 15. 0	52	. .	94·0 92·6	Light clouds over the Sun.	,,
	14. 30	Shade	29·2	33·3	4·1	19·6				. .	92·0 90·8	,,	,,
	16. 0	Sun	35·7	57·6	21·9	17·9				. .	89·0 89·3	,,	,,
	17. 30	Shade	59·9	63·8	3·9	23·4	25·6	22. 20. 15	52	73·2	90·1 91·6	,,	,,
	19. 0	Sun	2·4	35·0	32·6	28·4				. .	94·4 94·9	Light clouds scattered about.	,,
	20. 30	Shade	37·8	42·2	4·4	25·1				. .	95·0 95·5	,,	,,
	22. 22. 0	Sun	44·4	70·7	26·3	. .				76·3	94·0 94·0	,,	AH

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
May 25	2. 49. 0	Sun	1·6	37·9	36·3	. .				72·0	99·0 100·3	Light clouds scattered over the sky.	AH
	50. 30	Shade	39·6	41·5	1·9	34·6	35·1	2. 55. 30	40	. .	99·8 100·7	,, ,,	,,
	52. 0	Sun	42·3	79·0	36·7	34·7				. .	99·6 99·7	,, ,,	,,
	53. 30	Shade	80·6	82·7	2·1	34·9				74·0	100·6 101·0	,, ,,	,,
	55. 0	Sun	0·6	37·9	37·3	34·9				. .	102·0 103·0	,, ,,	,,
	56. 30	Shade	40·0	42·8	2·8	35·1				. .	102·8 102·3	,, ,,	,,
	58. 0	Sun	44·3	82·8	38·5	35·5				. .	102·5 104·3	,, ,,	..
	2. 59. 30	Shade	85·0	88·3	3·3	36·2				76·6	104·4 102·0	,, ,,	,,
	3. 1. 0	Sun	6·7	47·3	40·6	. .				77·9	102·4 104·0	,, ,,	AH
June 7	21. 30. 0	Sun	1·7	34·7	33·0	. .				54·9	90·8 91·8	Cloudless.	AH
	31. 30	Shade	37·4	42·4	5·0	28·0	28·5	21. 36. 30	49	. .	93·0 93·6	,,	,,
	33. 0	Sun	2·2	35·1	32·9	27·9				. .	93·4 94·8	,,	..
	34. 30	Shade	38·4	43·4	5·0	28·2				58·0	95·7 95·7	,,	,,
	36. 0	Sun	6·7	40·1	33·4	28·2				. .	95·3 95·6	,,	,,
	37. 30	Shade	43·7	49·2	5·5	28·8				. .	96·3 96·3	,,	,,
	39. 0	Sun	2·1	37·4	35·3	29·3				. .	96·5 96·0	,,	,,
	40. 30	Shade	41·2	47·8	6·6	29·2				61·2	96·7 96·4	,,	,,
	21. 42. 0	Sun	5·6	42·0	36·4	. .				. .	96·0 97·2	,,	AH
June 7	22. 43. 0	Sun	1·6	37·1	35·5	. .				68·1	93·6 95·4	Cloudless.	AH
	44. 30	Shade	38·6	40·2	1·6	34·5	34·8	22. 48. 0	56	68·7	96·0 97·4	,,	,,
	46. 0	Sun	0·1	36·8	36·7	34·1				. .	98·3 101·7	,,	,,
	47. 30	Shade	37·0	40·7	3·7	33·9				70·3	100·8 100·2	,,	,,
	49. 0	Sun	4·1	42·6	38·5	35·2				. .	98·6 99·0	,,	..
	50. 30	Shade	44·8	47·8	3·0	36·2				70·9	99·2 100·4	,,	..
	22. 52. 0	Sun	4·1	44·0	39·9	. .				71·6	99·7 98·6	,,	AH

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OBSERVATIONS WITH THE ACTINOMETER—*continued.*

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
June 7	23. 42. 0	Sun	—0·3	35·0	35·3	. .				74·1	99·0 99·1	Cloudless.	AH
	43. 30	Shade	35·3	34·7	—0·6	36·3				. .	99·6 99·6	,,	,,
	45. 0	Sun	34·3	70·3	36·0	36·3				. .	99·4 100·5	,,	,,
	46. 30	Shade	70·8	70·8	0·0	37·6	37·3	23. 47. 0	58	76·2	100·7 101·5	,,	,,
	48. 0	Sun	0·6	39·8	39·2	38·6				. .	102·3 102·0	,,	,,
	49. 30	Shade	41·1	42·2	1·1	37·8				. .	102·4 103·0	,,	,,
	23. 51. 0	Sun	43·0	81·6	38·6	. .				78·3	103·3 102·7	,,	AH
June 8	1. 40. 0	Sun	1·0	36·7	35·7	. .				76·4	96·3 100·5	Cloudless.	AH
	41. 30	Shade	37·4	37·2	—0·2	36·5				. .	101·6 103·1	,,	,,
	43. 0	Sun	37·2	74·0	36·8	36·6				. .	104·0 103·6	,,	,,
	44. 30	Shade	74·8	75·3	0·5	37·7	37·3	1. 45. 0	51	77·8	104·0 105·3	,,	,,
	46. 0	Sun	1·2	40·8	39·6	38·4				. .	105·3 104·9	,,	,,
	47. 30	Shade	42·1	43·9	1·8	37·3				. .	104·6 103·2	,,	,,
	1. 49. 0	Sun	44·8	83·4	38·6	. .				79·9	102·8 103·6	,,	AH
June 14	1. 38. 0	Sun	5·6	31·6	26·0	. .				68·4	87·7 90·4	Light clouds about the Sun.	AH
	39. 30	Shade	34·1	37·6	3·5	26·5				. .	92·4 95·4	,, ,,	,,
	41. 0	Sun	39·2	73·2	34·0	30·7				. .	96·9 99·0	,, ,,	,,
	42. 30	Shade	75·4	78·6	3·2	32·3				71·6	99·7 100·2	,, ,,	,,
	44. 0	Sun	1·4	38·3	36·9	33·1	30·9	1. 44. 30	51	. .	101·4 102·9	Clear about the Sun.	,,
	45. 30	Shade	40·7	45·0	4·3	31·5				. .	103·0 103·6	Light clouds.	,,
	47. 0	Sun	47·3	82·1	34·8	30·2				. .	105·2 106·2	,,	,,
	48. 30	Shade	84·8	89·7	4·9	32·1				74·1	104·7 106·0	,,	,,
	1. 50. 0	Sun	1·2	40·5	39·3	. .				75·8	106·0	,,	AH

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
June 19	2. 10. 0	Sun	7·2	32·8	25·6	. .				58·0	79·0 84·2	Light clouds about the Sun.	AH
	11. 30	Shade	35·6	39·1	3·5	26·5				. .	89·0 91·5	,,	,,
	13. 0	Sun	40·8	75·1	34·3	30·7				. .	93·6 95·6	Clear about the Sun.	,,
	14. 30	Shade	77·5	81·3	3·8	31·8				60·1	95·4 96·3	,,	,,
	16. 0	Sun	2·0	38·9	36·9	32·3	30·5	2. 16. 30	48	. .	97·2 98·4	,,	,,
	17. 30	Shade	40·9	46·3	5·4	30·8				. .	99·3 98·6	,,	,,
	19. 0	Sun	49·0	84·4	35·4	30·0				. .	96·3 97·0	,,	,,
	20. 30	Shade	87·5	93·0	5·5	31·7				62·6	98·2 98·0	,,	,,
	2. 22. 0	Sun	3·2	42·1	38·9	. .				64·3	96·3 96·7	,,	AH
June 19	23. 33. 0	Sun	12·0	49·5	37·5	. .				62·4	106·6 107·5	Cloudless.	AH
	34. 30	Shade	52·0	56·3	4·3	34·3				63·8	108·3 108·3	,,	,,
	36. 0	Sun	1·5	41·1	39·6	35·0				. .	108·0 109·1	,,	,,
	37. 30	Shade	44·2	49·0	4·8	35·0				65·7	108·5 108·3	,,	,,
	39. 0	Sun	1·8	41·8	40·0	34·6	35·3	23. 39. 30	59	. .	108·3 108·0	,,	,,
	40. 30	Shade	45·1	51·1	6·0	35·3				67·8	108·0	,,	,,
	42. 0	Sun	0·6	43·2	42·6	36·2				. .	108·2 108·3	,,	,,
	43. 30	Shade	47·3	54·1	6·8	37·0				. .	110·6 111·7	,,	,,
	23. 45. 0	Sun	1·5	46·5	45·0	. .				69·2	112·0 111·0	,,	AH
June 20	2. 2. 0	Sun	1·1	38·7	37·6	. .				76·4	104·0 105·5	Cloudless.	AH
	3. 30	Shade	40·2	41·0	0·8	37·3				. .	107·8 110·3	,,	,,
	5. 0	Sun	0·5	39·1	38·6	37·4				. .	111·5 112·8	,,	,,
	6. 30	Shade	40·7	42·3	1·6	37·3				78·9	112·5 112·7	,,	,,
	8. 0	Sun	4·6	43·8	39·2	37·2	37·5	2. 8. 30	49	. .	112·0 112·4	,,	,,
	9. 30	Shade	45·6	48·1	2·5	37·4				79·6	113·0 114·4	,,	,,
	11. 0	Sun	1·4	42·0	40·6	37·6				. .	113·3 113·7	,,	,,
	12. 30	Shade	44·8	48·3	3·5	38·2				80·7	113·0 112·2	,,	,,
	2. 14. 0	Sun	1·2	44·0	42·8	. .				82·2	111·6 110·3	,,	AH

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			Initial A.	Terminal B.									
	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
June 20	22. 22. 0	Sun	2·8	47·0	44·2	. .				71·0	102·2 107·2	Cloudless; very bright.	N
	23. 30	Shade	52·5	60·1	7·6	37·4	38·6	22. 28. 30	55	. .	. .	"	"
	25. 0	Sun	2·0	47·8	45·8	38·0				. .	111·8 112·0	"	"
	26. 30	Shade	53·5	61·5	8·0	39·2				. .	112·8	"	"
	28. 0	Sun	1·5	50·0	48·5	40·0				. .	115·2	"	"
	29. 30	Shade	57·5	66·5	9·0	38·7				. .	115·4	"	"
	31. 0	Sun	5·0	51·9	46·9	37·9				78·6	114·7	"	"
	32. 30	Shade	57·0	66·0	9·0	39·0				. .	. .	"	"
	22. 34. 0	Sun	6·0	55·0	49·0	. .				80·4	114·0 113·2	"	N
June 20	23. 39. 0	Sun	0·0	35·8	35·8	. .				83·7	101·0 104·7	Cloudless.	AH
	40. 30	Shade	36·2	35·2	−1·0	37·0	39·5	23. 45. 30	59	. .	104·3 105·2	"	"
	42. 0	Sun	34·8	71·0	36·2	36·9				. .	106·5 108·2	"	"
	43. 30	Shade	71·3	71·0	−0·3	38·7				86·2	110·0 112·5	"	"
	45. 0	Sun	0·0	40·6	40·6	40·4				. .	114·0 116·0	"	"
	46. 30	Shade	41·7	42·3	0·6	40·9				87·8	116·6 116·6	"	"
	48. 0	Sun	−0·2	42·2	42·4	41·1				. .	117·2 117·6	"	"
	49. 30	Shade	43·8	45·8	2·0	41·4				88·7	117·4 118·0	"	"
	23. 51. 0	Sun	3·4	47·7	44·3	. .				90·0	116·8	"	AH
June 21	2. 1. 0	Sun	0·5	33·6	33 1	. .				87·5	101·6 104·6	Clear about the Sun.	AH
	2. 30	Shade	34·0	33·4	−0·6	34·6	35·7	2. 7. 30	49	87·8	105·2 107·0	"	"
	4. 0	Sun	33·1	68·0	34·9	35·2				. .	108·0 109·5	"	"
	5. 30	Shade	68·6	68·6	0·0	35·8				88·2	109·8 111·2	"	"
	7. 0	Sun	1·0	37·8	36·8	36·3				. .	111·5 111·5	"	"
	8. 30	Shade	38·9	39·8	0·9	36·1				89·2	111·6 113·0	"	"
	10. 0	Sun	40·4	77·5	37·1	35·8				. .	112·8 113·0	"	"
	11. 30	Shade	78·7	80·5	1·8	35·8				90·3	112·4 111·7	"	"
	2. 13. 0	Sun	3·9	42·0	38·1	. .				92·0	111·0 109·0	"	AH

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			Initial A.	Terminal B.									
	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
June 23	1. 53. 0	Sun	6·0	51·2	45·2	. .				84·0	114·2 115·3	Clear about the Sun; light clouds elsewhere.	AH
	54. 30	Shade	53·8	57·0	3·2	41·8	40·4	1. 59. 30	50	84·3	114·0 113·6	"	"
	56. 0	Sun	4·2	48·9	44·7	41·5				. .	114·2 114·0	"	"
	57. 30	Shade	51·1	54·3	3·2	41·6				85·6	113·5 113·5	"	"
	1. 59. 0	Sun	4·0	48·9	44·9	41·1				. .	115·0 114·0	"	"
	2. 0. 30	Shade	51·3	55·6	4·3	39·0				87·7	113·6 112·2	"	"
	2. 0	Sun	3·7	45·3	41·6	37·2				. . 88·3	110·6 111·5	Light clouds near the Sun.	"
	3. 30	Shade	48·2	52·7	4·5	40·7				. .	113·0 112·6	"	"
	2. 5. 0	Sun	10·0	58·8	48·8	. .				89·7	112·0 112·5	Clear about the Sun.	AH
June 28	1. 37. 0	Sun	19·0	62·0	43·0	. .				66·8	96·1 103·0	A few light clouds near the Sun.	N
	38. 30	Shade	65·6	71·1	5·5	36·9	36·8	1. 41. 15	51	. .	. .	"	"
	40. 0	Sun	8·7	50·4	41·7	35·9				. .	103·2	"	"
	41. 30	Shade	54·5	60·6	6·1	36·9				. .	103·4	"	"
	43. 0	Sun	3·0	47·2	44·2	37·5				70·0	104·4	"	"
	1. 44. 30	Shade	51·9	59·2	7·3	. .				72·7	107·2	Cloudy after this time.	N
July 2	22. 2. 0	Sun	9·0	44·9	35·9	. .				67·0	94·0	Clear about the Sun; light clouds elsewhere.	AH
	3. 30	Shade	47·0	50·1	3·1	33·6	34·3	22. 7. 0	53	. .	93·2	"	"
	5. 0	Sun	0·9	38·5	37·6	34·4				. .	94·0	"	"
	6. 30	Shade	41·1	44·4	3·3	34·6				68·4	93·8	"	"
	8. 0	Sun	2·6	40·7	38·1	34·5				. . 70·2	96·7 97·3	"	"
	9. 30	Shade	43·5	47·5	4·0	34·6				. .	97·1	"	"
	22. 11. 0	Sun	1·0	40·2	39·2	. .				72·0	95·0	"	AH
July 24	23. 33 0	Sun	2·8	39·4	36·6	. .				73·5	102·6	Clear about the sun; light clouds and haze are generally prevalent.	AH
	34. 30	Shade	41·6	44·0	2·4	33·9	33·8	23. 38. 0	55	. .	105·1	"	"
	36. 0	Sun	45·1	81·0	35·9	33·3				. .	105·4	"	"
	37. 30	Shade	82·7	85·5	2·8	33·9				75·8	106·7	"	"
	39. 0	Sun	1·2	38·7	37·5	34·3				. .	109·0	"	"
	40. 30	Shade	40·9	44·5	3·6	33·6				. .	109·6	"	"
	23. 42. 0	Sun	46·3	83·1	36·8	. .				78·0	110·7	"	AH
July 29	1. 15. 0	Sun	2·0	40·3	38·3	. .				73·1	92·4 98·0	Light high cirrus scattered over the sky.	AH
	16. 30	Shade	42·8	46·2	3·4	35·7	36·9	1. 21. 30	50	. .	100·3	"	"
	18. 0	Sun	1·2	41·1	39·9	36·2				. .	102·6	"	"
	19. 30	Shade	43·2	47·2	4·0	37·0				75·6	103·0	"	"
	21. 0	Sun	2·7	44·8	42·1	37·8				. .	103·6	"	"
	22. 30	Shade	47·7	52·3	4·6	37·5				. .	102·0	"	"
	24. 0	Sun	1·9	44·0	42·1	37·2				78·0	103·0	"	"
	25. 30	Shade	47·0	52·2	5·2	37·2				. .	104·2	"	"
	1. 27. 0	Sun	1·3	44·0	42·7	. .				79·7	105·0	"	AH

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
Aug. 15	21. 54. 0	Sun	5·7	43·3	37·6	. .				64·0	81·9 82·1	A few light clouds.	N
	55. 30	Shade	45·9	49·2	3·3	31·4				. .	. .	,,	,,
	57. 0	Sun	50·7	82·4	31·7	28·5				. .	80·7 79·6	,,	,,
	21. 58. 30	Shade	84·8	87·9	3·1	24·9	27·3	21. 59. 0	44	66·0	. .	,,	,,
	22. 0. 0	Sun	7·2	31·5	24·3	21·6				. .	84·7 78·0	Sun obscured for 35 seconds.	,,
	1. 30	Shade	33·8	36·1	2·3	30·3				. .	. .	,,	,,
	22. 3. 0	Sun	37·4	78·2	40·8	. .				68·0	81·9 83·5	Sun free from cloud.	N
Aug. 18	21. 49. 0	Sun	2·4	30·7	28·3	. .				56·3	77·2	Cloudless.	N
	50. 30	Shade	34·7	39·7	5·0	22·8				. .	78·7	,,	,,
	52. 0	Sun	41·7	69·0	27·3	22·2				. .	80·6	,,	,,
	53. 30	Shade	72·5	77·7	5·2	23·1	22·9	21. 54. 0	42	. .	80·5	,,	,,
	55. 0	Sun	4·0	33·4	29·4	23·7				. .	80·8	,,	,,
	56. 30	Shade	36·8	43·0	6·2	22·8				. .	81·6	,,	,,
	21. 58. 0	Sun	44·5	73·0	28·5	. .				61·3	86·1 86·8	,,	N
Aug. 29	22. 34. 0	Sun	17·7	64·2	46·5	. .				58·2	88·6	Light clouds.	AH
	35. 30	Shade	69·0	76·2	7·2	38·8				. .	88·4	,,	,,
	37. 0	Sun	7·0	52·6	45·6	37·9				. .	93·6	,,	,,
	38. 30	Shade	57·2	65·4	8·2	36·7	37·4	22. 39. 0	42	63·0	91·8	,,	,,
	40. 0	Sun	8·0	52·2	44·2	36·0				. .	86·8	,,	,,
	41. 30	Shade	57·2	65·5	8·3	37·6				63·9	89·1	,,	,,
	22. 43. 0	Sun	8·3	55·8	47·5	. .				65·4	89·0	,,	AH
Aug. 30	22. 18. 0	Sun	9·4	54·0	44·6	. .				61·0	80·6	Cloudy.	AH
	19. 30	Shade	58·5	64·8	6·3	39·3				. .	81·3	,,	,,
	21. 0	Sun	13·4	60·0	46·6	39·4	40·2	22. 20. 45	40	62·1	86·3	,,	,,
	22. 30	Shade	64·3	72·3	8·0	41·9				63·4	91·2	,,	,,
	24. 0	Sun	5·4	58·6	53·2	45·0	45·9	22. 26. 0	41	64·3	93·0	Clear about the Sun.	,,
	25. 30	Shade	64·1	72·6	8·5	46·7				. .	95·1	,,	,,
	22. 27. 0	Sun	9·0	66·1	57·1	. .				65·9	96·7	,,	AH
Sept. 1	23. 39. 0	Sun	15·0	65·9	50·9	. .				69·0	90·0	Cloudy generally; clear at present about the Sun.	AH ,,
	40. 30	Shade	73·1	84·8	11·7	35·5				71·2	94·5	,,	,,
	42. 0	Sun	8·2	51·6	43·4	31·1				. .	95·9	Light clouds about the Sun.	,,
	43. 30	Shade	58·2	71·1	12·9	19·3	24·0	23. 44. 0	42	73·0	98·0	,,	,,
	45. 0	Sun	7·2	28·3	21·1	8·9				. .	91·2	Sun obscured.	,,
	46. 30	Shade	34·5	46·0	11·5	25·0				73·9	87·7	,,	,,
	23. 48. 0	Sun	5·5	57·5	52·0	. .				. .	88·3 94·7	Light clouds about the Sun.	AH
Sept. 5	1. 53. 0	Sun	11·0	59·8	48·8	. .				70·6	97·2	Thin clouds about the Sun.	AH
	54. 30	Shade	64·3	71·1	6·8	41·2				71·3	100·0	,,	,,
	56. 0	Sun	5·8	53·0	47·2	40·5				. .	94·6	,,	,,
	57. 30	Shade	57·0	63·6	6·6	43·1	42·6	1. 58. 0	36	72·2	90·6	,,	,,
	1. 59. 0	Sun	9·1	61·2	52·1	44·8				. .	93·8	,,	,,
	2. 0. 30	Shade	66·0	74·1	8·1	43·2				73·6	94·8	,,	,,
	2. 2. 0	Sun	7·9	58·4	50·5	. .				74·4	94·8	,,	AH

In every observation, whether in the Sun's rays or in the shade, the terminal reading was taken exactly one minute after the initial reading.
The "Apparent Effect of the Sun's Radiation" is found by comparing each change (whether in the Sun's rays or in the shade) with the mean of that which immediately precedes and that which immediately follows it.
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OBSERVATIONS WITH THE ACTINOMETER—*continued.*

Day, 1865.	Greenwich Mean Solar Time of the Initial Reading.	Instrument exposed to the Sun's Rays or in the Shade.	Readings of the Graduated Scale. Initial A.	Readings of the Graduated Scale. Terminal B.	Change in One Minute, B–A.	Apparent effect of the Sun's Radiation in parts of the Scale.	Mean Result of each Group in parts of the Scale.	Greenwich Mean Solar Time corresponding to the Mean of each Group.	Altitude of the Sun.	Thermometer in the fluid of the Actinometer.	Blackened Bulb Thermometer placed on Grass.	General Remarks.	Observer.
	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
Sept. 5	23. 2. 0	Sun	20·8	67·6	46·8	..				67·3	87·2	Clear about the Sun.	AH
											91·7		
	3. 30	Shade	71·6	78·4	6·8	42·3				68·0	93·8	,,	,,
	5. 0	Sun	1·6	53·0	51·4	44·6				..	96·5	,,	,,
	6. 30	Shade	57·4	64·3	6·9	45·5				69·0	98·4	,,	,,
	8. 0	Sun	8·4	61·8	53·4	46·0	45·5	23. 8. 30	42	..	99·9	,,	,,
	9. 30	Shade	66·4	74·4	8·0	47·2				70·4	101·0	,,	,,
	11. 0	Sun	4·6	61·5	56·9	48·2				..	101·5	,,	,,
	12. 30	Shade	67·2	76·6	9·4	44·4				72·0	101·5	,,	,,
	23. 14. 0	Sun	13·5	64·1	50·6	..				73·2	100·0	Light clouds about the Sun.	AH
Sept. 6	1. 12. 0	Sun	0·0	47·4	47·4	..				76·1	91·8	Clear about the Sun.	AH
	13. 30	Shade	49·3	52·2	2·9	31·4				76·2	92·5	,,	,,
	15. 0	Sun	2·3	23·6	21·3	18·5				..	92·0	Cloudy.	,,
	16. 30	Shade	25·3	28·0	2·7	13·5	20·2	1. 17. 0	38	76·8	89·0	,,	,,
	18. 0	Sun	3·0	14·0	11·0	8·4				..	84·3	Sun obscured by cloud.	,,
	19. 30	Shade	15·3	17·9	2·6	29·2				77·0	82·9	,,	,,
	1. 21. 0	Sun	18·5	71·0	52·5	..				77·5	88·0	Clear about the Sun.	AH
											94·0		
Sept. 6	2. 48. 0	Sun	0·0	41·2	41·2	..				77·0	88·0	Clear about the Sun.	AH
	49. 30	Shade	41·8	41·7	−0·1	42·8				78·3	93·6	,,	,,
	51. 0	Sun	1·0	45·2	44·2	43·5				..	96·0	,,	,,
											97·6	,,	,,
	52. 30	Shade	46·1	47·6	1·5	42·8				79·2	98·0	,,	,,
	54. 0	Sun	1·0	45·4	44·4	42·8	43·0	2. 54. 30	28	..	98·9	,,	,,
	55. 30	Shade	47·3	49·1	1·8	43·2				80·1	99·0	,,	,,
	57. 0	Sun	4·0	49·6	45·6	43·1				..	100·0	,,	,,
	2. 58. 30	Shade	52·8	56·0	3·2	42·6				80·8	99·6	,,	
	3. 0. 0	Sun	8·1	54·0	45·9	..				81·3	99·0	,,	AH
Sept. 6	23. 6. 0	Sun	2·0	43·2	41·2	..				67·0	86·8	Cloudless, light haze.	N
	7. 30	Shade	46·0	49·8	3·8	38·5				..	87·8	,,	,,
	9. 0	Sun	51·4	94·8	43·4	39·1				..	90·3	,,	,,
	10. 30	Shade	8·3	13·1	4·8	40·0				69·1	91·1	,,	,,
	12. 0	Sun	16·1	62·2	46·1	39·4				..	94·3	,,	,,
	13. 30	Shade	67·0	75·5	8·5	40·4	40·1	23. 14. 0	41	..	97·2	,,	,,
	15. 0	Sun	4·6	56·3	51·7	42·4				71·0	98·2	,,	,,
	16. 30	Shade	61·8	72·0	10·2	41·1				..	98·6	,,	,,
	18. 0	Sun	5·0	56·0	51·0	40·1				72·5	99·5	,,	,,
	19. 30	Shade	62·2	73·8	11·6	39·9				73·8	104·5	,,	,,
	23. 21. 0	Sun	12·1	64·0	51·9	..				74·7	104·9	Light clouds.	N
											102·2		
Sept. 7	2. 49. 0	Sun	7·0	59·8	52·8	..				82·0	99·2	Clear about the Sun.	AH
											102·8		
	50. 30	Shade	62·9	67·0	4·1	48·7				82·2	103·8	,,	,,
	52. 0	Sun	0·3	53·0	52·7	48·3				..	107·6	,,	,,
											109·2		
	53. 30	Shade	56·9	61·6	4·7	49·3				83·0	108·0	,,	,,
	55. 0	Sun	5·8	61·0	55·2	50·3				..	108·2	,,	,,
	56. 30	Shade	64·3	69·3	5·0	51·0	50·1	2. 57. 0	27	84·0	108·0	,,	,,
											108·9		
	58. 0	Sun	1·8	58·6	56·8	51·6				..	110·8	,,	,,
											109·8		
	2. 59. 30	Shade	62·6	67·9	5·3	51·3				85·0	110·0	,,	,,
	3. 1. 0	Sun	4·4	60·7	56·3	50·5				..	111·0	,,	,,
	2. 30	Shade	64·9	71·3	6·4	50·0				86·3	109·7	,,	,,
	3. 4. 0	Sun	10·6	67·1	56·5	..				87·0	109·0	,,	AH
											109·8		

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
Sept. 7	21. 49. 0	Sun	6·8	57·2	50·4	..				70·0	89·3 90·5	Cloudless. A very fine bright morning.	N
	50. 30	Shade	61·5	68·8	7·3	44·3	43·7	21. 52. 30	36	..	..	"	"
	52. 0	Sun	8·9	61·7	52·8	44·5				71·0	90·5	"	"
	53. 30	Shade	64·2	73·5	9·3	43·3				..	91·1	"	"
	55. 0	Sun	8·5	60·8	52·3	42·7				72·7	97·1	"	"
	56. 30	Shade	65·0	75·0	10·0	46·6	48·3	22. 0. 45	37	..	98·4	"	"
	58. 0	Sun	7·8	68·7	60·9	50·3				73·9	101·7 102·1	"	"
	21. 59. 30	Shade	76·6	87·9	11·3	48·7				..	..	"	"
	22. 1. 0	Sun	12·5	71·7	59·2	47·3				75·5	101·2	"	"
	22. 2. 30	Shade	78·0	90·5	12·5	48·8				..	99·0	"	"
	22. 4. 0	Sun	16·7	80·1	63·4	..				76·5 77·5	101·6 103·0	"	N
Sept. 7	22. 57. 0	Sun	0·0	50·0	50·0	..				82·1	100·5	Cloudless.	AH
	22. 58. 30	Shade	51·0	51·5	0·5	50·9	52·1	22. 59. 45	41	83·1	105·5	"	"
	23. 0. 0	Sun	0·2	53·0	52·8	51·8				..	106·8	"	"
	1. 30	Shade	55·1	56·5	1·4	53·6				84·0	105·3	"	"
	3. 0	Sun	1·2	58·3	57·1	54·9	54·6	23. 8. 0	41	..	107·4	"	"
	4. 30	Shade	61·0	64·0	3·0	54·9				85·0	106·6	"	"
	6. 0	Sun	1·2	60·0	58·8	55·4				..	106·6	"	"
	7. 30	Shade	63·4	67·3	3·9	54·4				86·0	105·8	"	"
	9. 0	Sun	1·0	58·9	57·9	53·7				..	106·6 107·0	"	"
	10. 30	Shade	61·5	66·0	4·5	54·7				87·0	107·3	"	"
	23. 12. 0	Sun	7·8	68·3	60·5	..				87·9	109·6	"	AH
Sept. 8	0. 36. 0	Sun	3·5	56·8	53·3	..				86·0	100·8	Clear near the Sun; light clouds here and there.	N
	37. 30	Shade	56·5	54·5	−2·0	55·4	56·8	0. 41. 0	40	..	107·0		"
	39. 0	Sun	10·2	63·6	53·4	54·9				86·2	110·6	"	"
	40. 30	Shade	64·0	63·0	−1·0	55·7				..	106·8	"	"
	42. 0	Sun	9·7	65·8	56·1	58·5				87·3	107·4	"	"
	43. 30	Shade	67·2	63·5	−3·7	59·5				88·0	106·6	"	"
	0. 45. 0	Sun	9·7	65·2	55·0	..				89.0	105·4 105·8	"	N
Sept. 8	0. 54. 0	Sun	9·5	74·8	65·3	..				89·8	105·2	A few light cirrus clouds near the Sun.	N
	55. 30	Shade	77·5	80·0	2·5	61·7	61·4	1. 0. 30	39	..	104·8		"
	57. 0	Sun	14·0	77·0	63·0	61·0				90·2	104·8	Clear near the Sun.	"
	0. 58. 30	Shade	79·1	80·5	1·4	60·6				..	105·7	"	"
	1. 0. 0	Sun	13·0	74·0	61·0	59·6				..	106·2	"	"
	1. 30	Shade	76·0	77·4	1·4	61·6				92·0	105·1	"	"
	3. 0	Sun	12·0	77·1	65·1	63·9				92·2	107·8	"	"
	4. 30	Shade	78·9	80·0	1·1	61·1				93·8	105·0	"	"
	1. 6. 0	Sun	5·4	64·6	59·2	..				94·1	100·0 104·8	"	N
Sept. 8	2. 7. 0	Sun	0·8	50·2	49·4	..				92·0	98·7	Cloudless.	AH
	8. 30	Shade	48·5	43·1	−5·4	55·5	55·8	2. 15. 0	32	92·6	98·2	"	"
	10. 0	Sun	2·2	53·0	50·8	55·6				..	99·6	"	"
	11. 30	Shade	51·6	47·4	−4·2	55·3				93·2	100·0	"	"
	13. 0	Sun	1·6	53·0	51·4	55·4				..	100·2	"	"
	14. 30	Shade	51·8	48·1	−3·7	55·6				93·9	101·2	"	"
	16. 0	Sun	1·5	54·0	52·5	56·2				..	101·0	"	"
	17. 30	Shade	52·9	49·3	−3·6	56·3				94·4	101·0	"	"
	19. 0	Sun	2·2	55·2	53·0	56·1				..	101·0	"	"
	20. 30	Shade	53·5	50·9	−2·6	56·4				95·0	101·0	"	"
	2. 22. 0	Sun	4·3	59·0	54·7	..				95·7	100·7 100·3	"	AH

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
Sept. 8	2. 53. 0		0·0	44·5	44·5	..				94·3	100·0	Cloudless.	AH
	54. 30	Shade	42·0	35·3	−6·7	50·9				..	98·8	,,	,,
	56. 0	Sun	0·7	44·6	43·9	50·9				94·8	99·6	,,	,,
	57. 30	Shade	41·9	34·6	−7·3	52·6	52·2	2. 58. 0	27	..	98·8	,,	,,
	2. 59. 0	Sun	1·4	48·2	46·8	53·6				95·3	99·6	,,	,,
	3. 0. 30	Shade	45·5	39·3	−6·2	53·2				95·6	98·8	,,	,,
	3. 2. 0	Sun	5·0	52·2	47·2	..				96·0	98·0	,,	AH
Sept. 14	2. 40. 0	Sun	8·8	50·3	41·5	..				71·0	90·4	Cloudless.	AH
	41. 30	Shade	54·1	59·4	5·3	37·5				71·3	92·2	,,	,,
	43. 0	Sun	2·1	46·3	44·2	38·4				..	95·0	,,	,,
	44. 30	Shade	51·0	57·2	6·2	39·2	39·0	2. 45. 0	27	72·4	96·9	,,	,,
	46. 0	Sun	5·3	51·8	46·5	39·5				..	96·8	,,	,,
	47. 30	Shade	56·7	64·6	7·9	40·6				73·7	98·1	,,	,,
	2. 49. 0	Sun	4·4	55·0	50·6	..				74·3	99·0	,,	AH
Sept. 14	23. 47. 0	Sun	9·0	55·8	46·8	..				66·8	95·5	Cloudless.	N
	48. 30	Shade	59·1	63·8	4·7	44·3				..	97·0	,,	,,
	50. 0	Sun	8·8	60·0	51·2	44·9				67·0	102·0	,,	,,
	51. 30	Shade	64·1	72·0	7·9	44·7	44·8	23. 52. 0	38	..	104·0	,,	,,
	53. 0	Sun	9·1	63·1	54·0	44·7				..	103·0	,,	,,
	54. 30	Shade	69·2	80·0	10·8	44·7				70·0	102·7	,,	,,
	56. 0	Sun	6·5	63·6	57·1	45·4				..	104·0	,,	,,
	57. 30	Shade	69·4	82 0	12·6	46·7				71·7	105·7	,,	,,
	23. 59. 0	Sun	9·4	71·0	61·6	47·9	47·3	0. 0. 15	39	..	107·7	,,	,,
15	0. 0. 30	Shade	79·6	94·4	14·8	47·2				73·2	106·5	,,	,,
	0. 2. 0	Sun	9·4	71·8	62·4	..				74·4	106·0	,,	N
											106·8		
Sept. 15	2. 16. 0	Sun	7·8	68·1	60·3	..				85·1	101·0	Cloudless.	AH
	17. 30	Shade	73 2	81·1	7·9	53·1				87·0	101·4	,,	,,
	19. 0	Sun	4·6	66·2	61·6	54·0				..	102·2	,,	,,
	20. 30	Shade	71·8	79·1	7·3	54·0	54·0	2. 20. 15	29	88·1	100·9	,,	,,
	22. 0	Sun	4·0	65·1	61·1	53·9				..	101·3	,,	,,
	23. 30	Shade	69·9	77·0	7·1	54·8				89·3	102·4	,,	,,
	25. 0	Sun	2·3	65·1	62·8	56·2	56·2	2. 27. 0	28	..	101·4	,,	,,
	26. 30	Shade	69·4	75·5	6·1	56·2				90·4	99·8	,,	,,
	2. 28. 0	Sun	12·9	74·8	61·9	..				91·0	99·2	,,	AH
Sept. 19	23. 19. 0	Sun	2·0	46·8	44·8	..				62·2	90·2	Cloudless.	AH
	20. 30	Shade	50·3	55·1	4·8	42·1				63·0	94·0	,,	,,
	22. 0	Sun	1·9	50·9	49·0	43·3				..	98·5	,,	,,
	23. 30	Shade	54·5	61·1	6·6	42·8				64·0	102·0	,,	,,
	25. 0	Sun	4·4	54·2	49·8	42·3	43·5	23. 25. 30	36	..	101·5	,,	,,
	26. 30	Shade	59·8	68·1	8·3	43·7				65·2	103·4	,,	,,
	28. 0	Sun	8·9	63·0	54·1	44·9				..	103·4	,,	,,
	29. 30	Shade	69·4	79·4	10·0	45·7				67·1	104·8	,,	,,
	23. 31. 0	Sun	12·4	69·7	57·3	..				68·2	105·0	,,	AH
Sept. 26	2. 55. 0	Sun	4·2	43·9	39·7	..				67·0	81·6	Cloudless.	AH
	56. 30	Shade	46·4	50·3	3·9	36·2				67·6	83·8	,,	,,
	58. 0	Sun	4·4	44·9	40·5	36·5				..	86·6	,,	,,
	2. 59. 30	Shade	47·9	51·9	4·0	36·8	36·4	3. 0. 0	20	68·4	87·0	,,	,,
	3. 1. 0	Sun	3·1	44·3	41·2	36·4				..	86·8	,,	,,
	2. 30	Shade	48·0	53·7	5·7	36·3				69·6	87·3	,,	,,
	3. 4. 0	Sun	16·3	59·0	42·7	..				70·0	85·4	,,	AH

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	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
Sept. 26	23. 19. 0	Sun	14·2	56·1	41·9	..				60·1	88·6	Cloudless.	AH
	20. 30	Shade	59·1	63·9	4·8	38·3				61·0	94·6	,,	,,
	22. 0	Sun	4·8	49·1	44·3	39·0				..	99·3	,,	,,
	23. 30	Shade	54·6	60·4	5·8	40·2				62·1	101·3	,,	,,
	25. 0	Sun	3·1	50·9	47·8	40·5	40·3	23. 25. 30	33	..	101·2	,,	,,
	26. 30	Shade	56·0	64·8	8·8	40·7				63·0	103·3	,,	,,
	28. 0	Sun	1·6	52·8	51·2	41·3				..	103·9	,,	,,
	29. 30	Shade	59·0	70·0	11·0	42·0				64·8	103·9	,,	,,
	23. 31. 0	Sun	5·8	60·7	54·9	..				66·0	104·2	,,	AH
Oct. 3	2. 29. 0	Sun	18·1	58·0	39·9	..				66·2	78·7	Light cirrus scattered over the sky.	AH
	30. 30	Shade	62·3	66·6	4·3	35·9				66·9	80·0	,,	,,
	32. 0	Sun	5·8	46·3	40·5	36·0				..	83·3	,,	,,
	33. 30	Shade	50·0	54·6	4·6	36·5	36·2	2. 34. 0	22	67·8	84·3	,,	,,
	35. 0	Sun	10·0	51·8	41·8	36·7				..	83·6	,,	,,
	36. 30	Shade	55·4	61·0	5·6	35·9				68·7	82·0	,,	,,
	2. 38. 0	Sun	4·0	45·1	41·1	..				69·4	80·7	,,	AH
Oct. 12	1. 54. 0	Sun	7·8	48·1	40·3	..				59·0	71·7	Clear about the Sun.	AH
	55. 30	Shade	50·5	53·8	3·3	36·4				60·0	72·3	,,	,,
	57. 0	Sun	0·0	39·0	39·0	35·4				..	73·9	,,	,,
	1. 58. 30	Shade	41·8	45 7	3·9	37·0				60·9	74·6	,,	,,
	2. 0. 0	Sun	12·1	54·9	42·8	38·8	37·7	2. 0. 30	22	..	74·1	,,	,,
	1. 30	Shade	58·0	62·1	4·1	38·7				61·9	73·3	,,	,,
	3. 0	Sun	4·7	47·6	42·9	38·8				..	72·7	,,	,,
	4. 30	Shade	51·0	55·1	4·1	39·1				63·0	72·6	,,	,,
	2. 6. 0	Sun	5·0	48·5	43·5	..				63·6	73·1	,,	AH
Oct. 12	22. 26. 0	Sun	0·0	15·8	15·8	..				49·4	61·2	Haze ; thin clouds over the Sun.	AH
	27. 30	Shade	17·4	19·0	1·6	18·7				..	64·0	,,	,,
	29. 0	Sun	20·0	44·8	24·8	22·8	22·8	22. 28. 45	25	..	66·4	,,	,,
	30. 30	Shade	46·9	49·2	2·3	27·0				50·1	68·0	,,	,,
	32. 0	Sun	50·4	84·3	33·9	30·9				..	69·7	,,	,,
	33. 30	Shade	87·0	90·6	3·6	31·4	31·2	22. 35. 30	25	52·3	72·2	,	,,
	35. 0	Sun	2·8	38·9	36·1	32·0				..	73·5	,,	,,
	36. 30	Shade	42·6	47·2	4·6	30·5				52·6	72·8	,,	,,
	22. 38. 0	Sun	49·7	83·7	34·0	..				53·2	72·8	,,	AH
Oct. 24	1. 50. 0	Sun	6·7	37·0	30·3	..				58·0	67·0	Clear near the Sun.	N
	51. 30	Shade	39·0	41·1	2·1	27·9				..	68·3	,,	,,
	53. 0	Sun	42·1	71·9	29·8	27·3				..	69·5	,,	,,
	54. 30	Shade	74·0	77·0	3·0	26·6	26·7	1. 55. 0	18	59·0	68·0	,,	,,
	56. 0	Sun	8·7	38·1	29·4	26·2				59·0	68·0	,,	,,
	57. 30	Shade	39·5	43·0	3·5	25·3				..	69·2	,,	,,
	1. 59. 0	Sun	44·3	72·4	28·1	..				60·0	68·4	,,	N
											68·0	,,	
Oct. 24	21. 57. 0	Sun	10·8	18·0	7·2	..				54·8	54·6	Dense clouds ; strong wind.	N
	21. 58. 30	Shade	19·1	21·4	2·3	5·4				..	55·2	,, ,,	,,
	22. 0. 0	Sun	22·0	30·2	8·2	6·4				..	55·7	,, ,,	,,
	1. 30	Shade	31·2	32·6	1·4	8·9	8·4	22. 2. 0	19	..	55·7	,, ,,	,,
	3. 0	Sun	33·0	45·5	12·5	11·3				..	56·2	,, gleams of sunshine for 5 seconds.	,,
	4. 30	Shade	46·4	47·3	0·9	9·9				..	59·2	,, sun shining.	,,
	22. 6. 0	Sun	47·8	57·0	9·2	..				55·0	59·8	Dense clouds.	N

In every observation, whether in the Sun's rays or in the shade, the terminal reading was taken exactly one minute after the initial reading.
The "Apparent Effect of the Sun's Radiation," is found by comparing each change (whether in the Sun's rays or in the shade) with the mean of that which immediately precedes and that which immediately follows it.
The initials N. and A. H. are those of Mr. W. C. Nash and Mr. A. Harding.

OBSERVATIONS WITH THE ACTINOMETER—*continued.*

Day, 1865.	Greenwich Mean Solar Time of the Initial Reading.	Instrument exposed to the Sun's Rays, or in the Shade.	Readings of the Graduated Scale. Initial A.	Readings of the Graduated Scale. Terminal B.	Change in One Minute, B−A.	Apparent effect of the Sun's Radiation in parts of the Scale.	Mean Result of each Group in parts of the Scale.	Greenwich Mean Solar Time corresponding to the Mean of each Group.	Altitude of the Sun.	Thermometer in the fluid of the Actinometer.	Blackened Bulb Thermometer placed on Grass.	General Remarks.	Observer.
	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
Oct. 30	2. 41. 0	Sun	22·0	39·5	17·5	..				56·0	52·0	Sun shining through thin clouds.	N
	42. 30	Shade	41·1	43·5	2·4	10·5				..	52·2	"	"
	44. 0	Sun	44·7	53·0	8·3	6·3				..	51·8	Denser clouds; occasional gleams of sunshine.	"
	45. 30	Shade	53·9	55·6	1·7	5·5	6·1	2. 46. 0	11	56·2	51·2	"	"
	47. 0	Sun	56·2	62·2	6·0	4·8				..	51·1	"	"
	48. 30	Shade	62·8	63·5	0·7	3·5				..	50·8	Dense cirro-stratus, Sun entirely obscured.	"
	2. 50. 0	Sun	63·8	66·1	2·3	..				56·3	50·0	"	N
Nov. 3	23. 34. 0	Sun	34.2	50·4	16·2	..				45·0	43·0	Cloudless; fog.	AH
	35. 30	Shade	54·2	60·7	6·5	8·1				..	43·4	"	"
	37. 0	Sun	38·8	51·8	13·0	7·2				..	44·0	"	"
	38. 30	Shade	55·4	60·6	5·2	9·1	8·5	23. 39. 0	20	47·5	44·8	"	"
	40. 0	Sun	10.0	25·3	15·3	10·0				..	45·0	"	"
	41. 30	Shade	27·2	32·5	5·3	8·2				..	46·7	"	"
	23. 43. 0	Sun	34·4	46·2	11·8	..				48·3	46·0	"	AH
Nov. 22	22. 29. 0	Sun	22·0	49·2	27·2	..				52·1	56·0	Partially cloudy.	AH
	30. 30	Shade	52·0	55 6	3·6	(15·0)				..	57·2	"	"
	32. 0	Sun	14·2	24·2	10·0	6·7				52·5	55·5	Sun obscured by clouds.	"
	33. 30	Shade	25·9	29·0	3·1	6·1				..	54·4	"	"
	35. 0	Sun	30·9	39·3	8·4	5·6	5·7	22. 35. 30	14	53·2	53·3	"	"
	36. 30	Shade	39·8	42·4	2·6	4·4				..	52·8	"	"
	22. 38. 0	Sun	43·6	49·2	5·6	..				53·5	52·3	"	AH
Nov. 27	2. 39. 0	Sun	39·5	61·1	21·6	..				51·0	50·7	Clear about the Sun.	N
	40. 30	Shade	63·9	67·4	3·5	17·4				..	51·2	"	"
	42. 0	Sun	69·0	89·3	20·3	17·2				..	49·7	"	"
	43. 30	Shade	91·1	93·8	2·7	16·0	16·1	2. 44. 0	6	52·0	50·0	"	"
	45. 0	Sun	9·5	26·7	17·2	14·9				..	49·6	"	"
	46. 30	Shade	28·4	30·3	1·9	15·2				..	49·8	"	"
	2. 48. 0	Sun	31·0	48·0	17·0	..				52·2	49·2	"	N
Dec. 1	21. 53. 0	Sun	5·0	24·7	19·7	..				48·0	45·5	Cloudless about the Sun.	AH
	54. 30	Shade	26·0	27·6	1·6	18·2				..	47·3	"	"
	56. 0	Sun	28·1	48·0	19·9	18·3				..	48·4	"	"
	57. 30	Shade	49·5	51·1	1·6	18·4				..	49·0	"	"
	21. 59. 0	Sun	51·6	71·7	20·1	18·7	18·9	21. 59. 30	11	..	49·0	"	"
	22. 0. 30	Shade	73·0	74·1	1·1	19·4				..	49·0	"	"
	2. 0	Sun	8·7	29·7	21·0	19·8				..	49·2	"	"
	3. 30	Shade	31·2	32·5	1·3	19·5				..	49·3	"	"
	22. 5. 0	Sun	32·9	53·6	20·7	..				49·8	49·2	"	AH
Dec. 11	2. 33. 0	Sun	5·6	15·8	10·2	..				51·0	46·2	Clear about the Sun.	AH
	34. 30	Shade	17·4	20·0	2·6	5·8				..	45·8	"	"
	36. 0	Sun	21·2	27·9	6·7	4·6	4·7	2. 36. 30	5	..	45·2	Light clouds about the Sun.	"
	37. 30	Shade	29·3	30·9	1·6	3·7				..	44·7	"	"
	2. 39. 0	Sun	31·7	35·6	3·9	..				51·2	44·3	Sun obscured.	AH

In every observation, whether in the Sun's rays or in the shade, the terminal reading was taken exactly one minute after the initial reading.
The "Apparent Effect of the Sun's Radiation" is found by comparing each change (whether in the Sun's rays or in the shade) with the mean of that which immediately precedes and that which immediately follows it.
The initials N. and A. H. are those of Mr. W. C. Nash and Mr. A. Harding.

OBSERVATIONS WITH THE ACTINOMETER—*concluded.*

Day, 1865.	Greenwich Mean Solar Time of the Initial Reading.	Instrument exposed to the Sun's Rays, or in the Shade.	Readings of the Graduated Scale.		Change in One Minute, B–A.	Apparent effect of the Sun's Radiation in parts of the Scale.	Mean Result of each Group in parts of the Scale.	Greenwich Mean Solar Time corresponding to the Mean of each Group.	Altitude of the Sun.	Thermometer in the fluid of the Actinometer.	Blackened Bulb Thermometer placed on Grass.	General Remarks.	Observer.
			Initial A.	Terminal B.									
	h m s		div.	div.	div.	div.	div.	h m s	°	°	°		
Dec. 20	21. 28. 0	Sun	6·5	20·1	13·6	..				51·5	51·0	Generally cloudless.	AH
	29. 30	Shade	20·9	21·3	0·4	13·9	14·9	21. 32. 15	8	..	50·0	,,	,,
	31. 0	Sun	21·2	36·2	15·0	14·8				..	50·7	,,	,,
	32. 30	Shade	36·9	37·0	0·1	14·9				..	50·8	,,	,,
	34. 0	Sun	37·0	52·0	15·0	15·0				..	51·1	,,	,,
	35. 30	Shade	52·6	52·5	−0·1	15·7				..	51·0	,,	,,
	37. 0	Sun	52·3	68·6	16·3	16·5	16·9	21. 43. 30	9	..	51·4	,,	,,
	38. 30	Shade	69·0	68·7	−0·3	16·5				..	51·8	,,	,,
	40. 0	Sun	68·7	84·8	16·1	16·5				..	52·2	,,	,,
	41. 30	Shade	85·2	84·7	−0·5	17·0				53·0	52·2	,,	,,
	43. 0	Sun	8·2	25·0	16·8	17·3				..	52·4	,,	,,
	44. 30	Shade	25·3	24·8	−0·5	17·1				..	52·4	,,	,,
	46. 0	Sun	24·5	40·9	16·4	16·9				..	52·6	,,	,,
	47. 30	Shade	41·3	40·9	−0·4	17·0				..	52·5	,,	,,
	21. 49. 0	Sun	40·6	57·3	16·7	..				54·4	52·6	,,	AH
Dec. 29	23. 27. 0	Sun	34·9	62·8	27·9	..				49·0	47·7	Cloudless.	AH
	28. 30	Shade	65·2	68·3	3·1	25·0	25·1	23. 33. 30	13	49·3	48·2	,,	,,
	30. 0	Sun	8·2	36·5	28·3	25·9				..	49·0	,,	,,
	31. 30	Shade	38·4	40·0	1·6	25·6				..	49·2	,,	,,
	33. 0	Sun	41·0	67·0	26·0	24·8				..	49·2	,,	,,
	34. 30	Shade	68·6	69·5	0·9	25·3				50·6	49·2	,,	,,
	36. 0	Sun	5·0	31·5	26·5	25·9				..	49·4	,,	,,
	37. 30	Shade	33·0	33·4	0·4	23·1				..	48·7	,,	,,
	23. 39. 0	Sun	33·5	54·0	20·5	..				51·6	48·6	,,	AH
Dec. 30	2. 38. 0	Sun	14·0	32·5	18·5	..				52·0	45·6	Cloudless.	AH
	39. 30	Shade	34·2	36·5	2·3	15·5	15·2	2. 43. 0	5	..	46·0	,,	,,
	41. 0	Sun	37·0	54·0	17·0	15·5				..	45·8	,,	,,
	42. 30	Shade	55·2	55·9	0·7	15·4				52·0	45·7	,,	,,
	44. 0	Sun	11·6	26·8	15·2	15·0				..	45·5	,,	,,
	45. 30	Shade	27·0	26·7	−0·3	14·7				..	45·6	,,	,,
	2. 47. 0	Sun	26·0	39·6	13·6	..				52·5	45·5	,,	AH

In every observation, whether in the Sun's rays or in the shade, the terminal reading was taken exactly one minute after the initial reading.

The "Apparent Effect of the Sun's Radiation" is found by comparing each change (whether in the Sun's rays or in the shade) with the mean of that which immediately precedes and that which immediately follows it.

The initials N. and A. H. are those of Mr. W. C. Nash and Mr. A. Harding.

READINGS OF THERMOMETERS SUNK IN THE GROUND.

(I.)—Reading of a Thermometer whose bulb is sunk to the depth of 25·6 feet (24 French feet) below the surface of the soil, at Noon on every Day, except Sundays, Good Friday and Christmas Day.

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	S	51 ·01	50 ·20	49 ·27	48 ·58	48 ·40	48 ·85	49 ·75	50 ·83	S	52 ·51	52 ·86
2	51 ·63	50 ·98	50 ·16	S	48 ·57	48 ·40	S	49 ·78	50 ·89	51 ·78	52 ·61	52 ·87
3	51 ·62	50 ·96	50 ·24	49 ·22	48 ·58	48 ·43	48 ·91	49 ·80	S	51 ·81	52 ·66	S
4	51 ·65	50 ·91	50 ·10	49 ·19	48 ·58	S	48 ·96	49 ·85	50 ·97	51 ·82	52 ·57	52 ·88
5	51 ·63	S	S	49 ·18	48 ·55	48 ·40	48 ·97	49 ·91	51 ·00	51 ·85	S	52 ·88
6	51 ·59	50 ·86	50 ·01	49 ·17	48 ·53	48 ·47	49 ·00	S	51 ·02	51 ·88	52 ·62	52 ·88
7	51 ·58	50 ·77	49 ·95	49 ·13	S	48 ·47	49 ·02	49 ·96	51 ·07	51 ·91	52 ·67	52 ·88
8	S	50 ·80	49 ·90	49 ·12	48 ·50	48 ·47	49 ·04	50 ·00	51 ·10	S	52 ·67	52 ·88
9	51 ·57	50 ·78	49 ·93	S	48 ·47	48 ·51	S	50 ·04	51 ·12	51 ·97	52 ·68	52 ·86
10	51 ·55	50 ·73	49 ·88	49 ·07	48 ·45	48 ·51	49 ·10	50 ·07	S	51 ·98	52 ·70	S
11	51 ·53	50 ·69	49 ·87	49 ·04	48 ·45	S	49 ·10	50 ·10	51 ·18	52 ·02	52 ·70	52 ·88
12	51 ·48	S	S	49 ·02	48 ·44	48 ·50	49 ·15	50 ·14	51 ·22	52 ·04	S	52 ·84
13	51 ·46	50 ·63	49 ·80	48 ·98	48 ·43	48 ·55	49 ·16	S	51 ·26	52 ·06	52 ·76	52 ·80
14	51 ·44	50 ·61	49 ·77	Good Friday.	S	48 ·55	49 ·20	50 ·20	51 ·28	52 ·16	52 ·75	52 ·79
15	S	50 ·57	49 ·72	48 ·92	48 ·41	48 ·56	49 ·26	50 ·23	51 ·32	S	52 ·78	52 ·78
16	51 ·39	50 ·55	49 ·72	S	48 ·40	48 ·58	S	50 ·30	51 ·36	52 ·12	52 ·78	52 ·77
17	51 ·37	50 ·53	49 ·68	48 ·92	48 ·40	48 ·59	49 ·32	50 ·31	S	52 ·16	52 ·80	S
18	51 ·34	50 ·52	49 ·64	48 ·96	48 ·40	S	49 ·32	50 ·34	51 ·40	52 ·16	52 ·75	52 ·77
19	51 ·32	S	S	48 ·84	48 ·39	48 ·60	49 ·36	50 ·39	51 ·43	52 ·16	S	52 ·76
20	51 ·30	50 ·45	49 ·57	48 ·83	48 ·40	48 ·64	49 ·40	S	51 ·46	52 ·21	52 ·85	52 ·75
21	51 ·25	50 ·41	49 ·58	48 ·82	S	48 ·68	49 ·35	50 ·47	51 ·44	52 ·21	52 ·85	52 ·77
22	S	50 ·39	49 ·53	48 ·81	48 ·40	48 ·68	49 ·44	50 ·49	51 ·48	S	52 ·80	52 ·71
23	51 ·22	50 ·40	49 ·49	S	48 ·40	48 ·72	S	50 ·50	51 ·51	52 ·27	52 ·80	52 ·70
24	51 ·18	50 ·36	49 ·43	48 ·75	48 ·38	48 ·72	49 ·54	50 ·56	S	52 ·34	52 ·85	S
25	51 ·16	50 ·32	49 ·45	48 ·73	48 ·40	S	49 ·56	50 ·60	51 ·59	52 ·35	52 ·90	Christmas Day
26	51 ·14	S	S	48 ·71	48 ·40	48 ·74	49 ·59	50 ·64	51 ·64	52 ·38	S	52 ·68
27	51 ·11	50 ·25	49 ·38	48 ·70	48 ·40	48 ·78	49 ·65	S	51 ·65	52 ·41	52 ·86	52 ·63
28	51 ·07	50 ·27	49 ·35	48 ·67	S	48 ·80	49 ·64	50 ·71	51 ·67	52 ·41	52 ·86	52 ·64
29	S		49 ·32	48 ·62	48 ·40	48 ·82	49 ·68	50 ·73	51 ·70	S	52 ·88	52 ·64
30	51 ·04		49 ·29	S	48 ·41	48 ·83	S	50 ·77	51 ·73	52 ·48	52 ·88	52 ·62
31	51 ·03		49 ·28		48 ·40		49 ·74	50 ·83		52 ·50		S
Means.	51 ·37	50 ·61	49 ·71	48 ·95	48 ·45	48 ·59	49 ·28	50 ·28	51 ·32	52 ·13	52 ·75	52 ·78

At temperatures exceeding 52° ·8 the fluid of this thermometer enters the upper bulb; the estimated readings from November 20 to December 12 are therefore liable to some uncertainty.

(II.)—Reading of a Thermometer whose bulb is sunk to the depth of 12 ·8 feet (12 French feet) below the surface of the soil, at the same times.

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	S	47 ·50	45 ·81	45 ·02	46 ·02	48 ·86	51 ·89	54 ·39	55 ·84	S	56 ·25	53 ·64
2	49 ·79	47 ·42	45 ·76	S	46 ·16	48 ·91	S	54 ·45	55 ·94	57 ·00	56 ·25	53 ·55
3	49 ·73	47 ·32	45 ·65	44 ·95	46 ·26	49 ·04	52 ·15	54 ·48	S	57 ·00	56 ·14	S
4	49 ·69	47 ·23	45 ·67	44 ·89	46 ·34	S	52 ·28	54 ·61	56 ·01	57 ·00	56 ·08	53 ·45
5	49 ·59	S	S	44 ·90	46 ·48	49 ·28	52 ·35	54 ·75	56 ·03	57 ·00	S	53 ·38
6	49 ·50	47 ·08	45 ·58	44 ·87	46 ·58	49 ·40	52 ·47	S	56 ·05	57 ·00	55 ·90	53 ·32
7	49 ·40	47 ·05	45 ·53	44 ·85	S	49 ·48	52 ·51	54 ·90	56 ·12	57 ·20	55 ·82	53 ·30
8	S	46 ·95	45 ·53	44 ·81	46 ·76	49 ·58	52 ·60	54 ·96	56 ·18	S	55 ·80	53 ·21
9	49 ·26	46 ·89	45 ·51	S	46 ·86	49 ·62	S	55 ·03	56 ·14	. .	55 ·69	53 ·14
10	49 ·17	46 ·82	45 ·44	44 ·82	46 ·90	49 ·81	52 ·75	55 ·10	S	57 ·10	55 ·59	S
11	49 ·07	46 ·74	45 ·48	44 ·81	47 ·00	S	52 ·83	55 ·13	56 ·21	57 ·20	55 ·47	53 ·02
12	48 ·97	S	S	44 ·80	47 ·15	49 ·98	52 ·92	55 ·16	56 ·25	57 ·20	S	52 ·90

(II.)—Reading of a Thermometer whose bulb is sunk to the depth of 12·8 feet (12 French feet)—*concluded.*

Days of the Month 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
13	48·89	46·65	45·45	44·82	47·23	50·10	53·00	*S*	56·30	56·99	55·34	52·82
14	48·80	46·62	45·41	Good Friday.	*S*	50·21	53·10	55·24	56·33	57·00	55·19	52·78
15	*S*	46·57	45·37	44·84	47·38	50·32	53·25	55·26	56·41	*S*	55·13	52·70
16	48·62	46·54	45·40	*S*	47·54	50·40	*S*	55·34	56·47	..	55·00	52·66
17	48·54	46·51	45·36	44·97	47·65	50·54	53·40	55·35	*S*	..	54·94	*S*
18	48·45	46·47	45·32	45·02	47·74	*S*	53·43	55·38	56·52	56·85	54·78	52·56
19	48·40	*S*	*S*	45·06	47·78	50·68	53·50	55·46	56·55	..	*S*	52·50
20	48·35	46·35	45·27	45·13	47·92	50·85	53·60	*S*	56·61	..	54·64	52·43
21	48·26	46·30	45·25	45·17	*S*	51·00	53·69	55·52	56·52	56·76	54·54	52·42
22	*S*	46·27	45·28	45·28	48·04	51·06	53·73	55·55	56·60	*S*	54·42	52·28
23	48·20	46·25	45·24	*S*	48·12	51·21	*S*	55·62	56·68	56·78	54·33	52·23
24	48·10	46·18	45·25	45·44	48·19	51·25	53·95	55·63	*S*	56·80	54·24	*S*
25	48·05	46·07	45·22	45·48	48·25	*S*	54·00	55·65	56·80	56·75	54·15	Christmas Day
26	48·02	*S*	*S*	45·58	48·35	51·43	54·08	55·69	56·90	56·69	*S*	52·05
27	47·93	45·94	45·13	45·69	48·45	51·55	54·20	*S*	56·95	56·66	53·92	51·92
28	47·81	45·80	45·13	45·76	*S*	51·65	54·17	55·74	..	56·53	53·85	51·90
29	*S*		45·08	45·84	48·57	51·83	54·28	55·72	56·90	*S*	53·76	51·86
30	47·69		45·06	*S*	48·65	51·80	*S*	55·78	56·95	56·43	53·69	51·75
31	47·65		45·04		48·75		54·38	55·84		56·36		*S*
Means.	48·69	46·65	45·38	45·12	47·45	50·38	53·25	55·25	56·41	(56·87)	55·03	52·71

At temperatures above 56°·8 the fluid of this thermometer enters the upper bulb; the inserted estimated readings from September 26 to October 20 are liable to some uncertainty.

(III.)—Reading of a Thermometer whose bulb is sunk to the depth of 6·4 feet (6 French feet) below the surface of the soil, at the same times.

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	*S*	..	..	..	49·20	53·45	57·66	60·08	60·03	*S*	55·62	51·93
2	46·40	..	..	..	49·39	53·64	*S*	60·15	60·10	60·70	55·58	51·85
3	46·30	..	..	..	49·52	53·85	57·87	60·14	*S*	60·60	55·39	*S*
4	46·22	..	..	..	49·63	*S*	57·89	60·19	60·05	60·48	55·15	51·70
5	46·10	..	..	..	49·60	54·16	57·88	60·18	60·12	60·48	*S*	51·61
6	45·97	..	..	..	49·88	54·27	57·91	*S*	60·17	60·40	54·77	51·50
7	45·85	..	..	..	*S*	54·37	57·97	60·10	60·29	60·32	54·53	51·39
8	*S*	..	..	..	50·12	54·50	58·12	59·82	60·44	*S*	54·31	51·31
9	45·75	..	..	..	50·30	54·73	*S*	59·77	60·46	60·05	54·07	51·22
10	45·71	..	..	..	50·42	54·90	58·42	59·73	*S*	59·90	53·87	*S*
11	45·67	..	..	..	50·65	*S*	58·55	59·73	60·66	59·78	53·68	51·22
12	45·63	..	..	44·52	50·84	55·23	58·67	59·71	60·77	59·65	*S*	51·20
13	45·70	..	..	44·78	50·91	55·48	58·66	*S*	60·90	59·56	53·35	51·12
14	45·60	..	..	Good Friday.	*S*	55·60	58·78	59·73	60·96	59·48	53·16	51·09
15	*S*	..	..	45·35	50·92	55·70	58·91	59·73	61·09	*S*	53·05	50·98
16	45·62	..	..	*S*	50·95	55·84	*S*	59·75	61·20	59·18	52·88	50·84
17	45·62	..	..	45·90	51·02	55·96	58·91	59·73	*S*	59·09	52·80	*S*
18	45·60	..	..	46·10	51·08	*S*	58·94	59·71	61·25	58·89	52·60	50·57
19	45·54	..	..	46·31	51·18	56·12	59·03	59·74	61·29	58·67	*S*	50·41
20	45·30	..	..	46·58	51·14	56·34	59·18	*S*	61·36	58·56	52·45	50·30
21	45·38	..	..	46·79	*S*	56·46	59·26	59·71	61·21	58·34	52·35	50·18
22	*S*	..	..	47·11	51·42	56·49	59·26	59·68	61·30	*S*	52·26	50·01
23	45·20	..	..	*S*	51·50	56·64	*S*	59·60	61·30	57·50	52·21	49·97
24	45·06	..	..	47·58	51·74	56·59	59·40	59·97	*S*	57·40	52·25	*S*
25	44·90	..	..	47·84	52·00	*S*	59·43	59·90	61·25	57·21	52·30	Christmas Day
26	44·70	..	..	48·11	52·24	56·98	59·50	59·90	61·18	57·04	*S*	49·80

(III.)—Reading of a Thermometer whose bulb is sunk to the depth of 6·4 feet (6 French feet)—*concluded.*

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
27	44·22	..	..	48·30	52·48	57·20	59·67	*S*	61·11	56·63	52·18	49·58
28	..	..	..	48·58	*S*	57·36	59·67	59·96	60·96	56·48	52·19	49·60
29	..		..	48·78	52·84	57·46	59·85	59·90	60·90	*S*	52·10	49·55
30	..		..	*S*	53·05	57·56	*S*	59·98	60·80	56·25	52·00	49·44
31	..		..		53·24		60·06	60·07		55·92		*S*
Means .	45·57	...	...	(47·20)	51·01	55·65	58·82	59·88	60·81	58·79	53·35	50·73

At temperatures below 44° the fluid of this thermometer descends below the scale ; the readings from January 28 to April 11 were less than 44°.

(IV.)—Reading of a Thermometer whose bulb is sunk to the depth of 3·2 feet (3 French feet) below the surface of the soil, at the same times.

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	*S*	..	40·64	..	51·75	57·38	61·00	63·73	61·58	*S*	52·08	48·87
2	41·62	..	40·99	*S*	51·50	57·38	*S*	63·13	61·72	61·52	51·81	48·70
3	41·32	..	41·10	40·54	51·50	57·22	60·51	62·35	*S*	61·45	51·28	*S*
4	41·02	40·30	41·02	40·92	51·72	*S*	60·65	61·61	62·39	61·30	50·90	48·24
5	40·92	*S*	*S*	41·43	52·10	57·20	61·00	61·22	62·72	61·10	*S*	48·07
6	41·20	40·32	40·90	42·03	52·40	57·52	61·62	*S*	63·08	60·68	50·09	48·05
7	41·57	40·43	40·75	42·88	*S*	58·18	62·16	61·11	63·24	60·20	49·70	48·17
8	*S*	40·68	40·55	43·53	52·62	58·56	62·51	61·40	63·50	*S*	49·52	48·51
9	41·50	41·04	40·42	*S*	52·50	58·84	*S*	61·54	63·68	59·53	49·50	48·73
10	41·70	40·72	40·25	45·03	52·84	59·28	62·41	61·51	*S*	59·55	49·55	*S*
11	42·20	40·34	40·24	45·77	52·96	*S*	62·28	61·62	63·98	59·50	49·43	48·64
12	42·60	*S*	*S*	46·14	52·41	59·50	62·11	61·77	64·16	59·44	*S*	48·41
13	42·88	39·60	40·20	46·53	52·08	59·32	61·71	*S*	64·30	59·28	49·07	48·10
14	42·49	39·41	40·28	Good Friday	*S*	59·32	61·60	61·52	64·31	58·80	48·90	47·67
15	*S*	..	40·30	46·98	52·06	59·48	61·75	61·44	64·33	*S*	48·65	47·28
16	42·27	..	40·16	*S*	52·27	59·58	*S*	61·48	64·33	58·09	48·80	46·78
17	42·05	..	40·10	47·33	52·04	59·81	62·57	61·42	*S*	57·80	48·70	*S*
18	41·80	..	40·20	47·85	51·97	*S*	62·78	61·30	64·44	57·59	48·91	46·31
19	41·46	..	*S*	48·42	52·20	59·70	62·62	61·22	64·32	57·13	*S*	46·28
20	41·35	..	40·03	48·82	52·53	59·73	62·39	*S*	64·21	56·60	49·16	46·25
21	41·00	..	39·75	49·20	*S*	59·86	62·20	61·26	63·78	55·74	49·58	46·33
22	*S*	..	39·50	49·67	53·86	60·09	62·13	61·50	63·58	*S*	49·81	46·42
23	40·20	..	39·43	*S*	54·58	60·69	*S*	61·58	63·20	53·78	49·90	46·55
24	39·90	..	39·46	50·61	55·31	60·94	62·52	61·81	*S*	54·00	49·97	*S*
25	39·60	..	39·10	50·89	55·54	*S*	62·78	61·69	62·50	54·12	50·08	Christmas Day
26	39 50	*S*	*S*	51·10	55·67	61·46	63·22	61·93	62·30	54·10	*S*	45·91
27	..	39·87	..	51·38	55·82	61·57	63·71	*S*	62·28	53·51	49·80	45·90
28	..	40·10	..	51·60	*S*	61·52	63·88	62·10	61·97	53·40	49·41	45·91
29	..		..	51·85	56·58	61·45	64·07	62·14	61·82	*S*	49·08	45·85
30	..		..	*S*	56·90	61·34	*S*	62·10	61·68	52·71	48·99	46·05
31	..		..		57·19		64·10	61·81		52·20		*S*
Means .	41·37	(40·26)	40·24	46·98	53·37	59·50	62·31	61·75	63·21	57·43	49·72	47·28

At temperatures below 39°·70 the fluid of this thermometer descends below the scale ; the readings were below this value from January 27 to February 3, Febuary 15 to 25, and March 27 to April 1. The readings less than this value which appear in the above table are estimated readings only, and therefore liable to some uncertainty.

(V.)—Reading of a Thermometer whose bulb is sunk to the depth of 1 inch below the surface of the soil, within the case which covers the tops of the deep-sunk Thermometers, at the same times.

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	S	41·3	43·6	45·5	53·4	63·0	60·3	59·5	62·8	S	46·0	46·5
2	33·8	45·3	44·2	S	56·4	59·2	S	60·3	66·6	62·9	45·0	45·2
3	37·0	43·3	41·0	45·6	58·3	60·3	63·9	55·7	S	63·2	45·5	S
4	41·3	40·0	40·8	43·8	57·2	S	67·3	56·5	68·0	58·3	43·0	46·5
5	42·2	S	S	49·1	59·5	63·2	68·5	60·2	68·5	58·2	S	46·8
6	41·7	39·3	40·6	50·9	58·3	67·3	69·5	S	67·0	57·3	43·8	48·2
7	38·7	44·7	39·5	51·5	S	66·1	67·4	63·8	68·6	56·4	45·0	50·0
8	S	41·1	38·8	57·1	54·0	62·4	66·5	63·4	70·5	S	47·1	49·2
9	43·4	38·5	39·3	S	58·0	66·8	S	62·8	68·3	61·5	47·5	47·7
10	46·3	36·8	39·3	54·5	53·6	66·5	65·0	64·7	S	59·9	46·1	S
11	45·1	34·2	41·4	52·5	51·0	S	64·2	65·5	67·4	60·2	44·5	45·8
12	45·6	S	S	52·7	51·8	60·2	61·9	63·4	68·8	58·0	S	44·4
13	40·0	33·2	41·5	53·5	52·5	62·7	62·4	S	68·5	55·4	45·5	41·7
14	42·2	34·2	39·5	Good Friday.	S	65·4	64·8	62·5	67·6	55·1	44·0	41·4
15	S	31·2	38·4	50·4	54·8	63·3	66·9	63·3	67·9	S	49·2	41·5
16	40·0	35·0	40·5	S	53·6	63·7	S	62·8	69·6	53·3	44·3	40·5
17	38·8	35·4	39·6	56·4	54·7	63·8	69·5	62·3	S	57·3	51·0	S
18	37·0	37·2	39·4	56·6	55·4	S	65·2	62·2	66·7	53·9	47·1	44·0
19	38·1	S	S	53·6	56·2	59·3	64·8	61·3	66·0	50·0	S	44·2
20	37·8	36·1	36·0	53·5	60·2	63·3	64·1	S	65·5	48·6	52·4	45·1
21	33·8	35·2	36·2	55·5	S	66·0	65·8	64·4	62·0	47·4	52·0	47·2
22	S	36·6	37·9	58·0	63·5	65·7	64·8	65·2	62·6	S	51·5	45·2
23	35·0	42·8	37·8	S	63·9	67·9	S	63·4	59·6	50·3	52·7	44·1
24	36·0	44·5	37·4	56·1	60·4	67·0	67·5	62·9	S	52·3	52·2	S
25	35·5	40·8	38·0	54·1	60·3	S	68·6	64·1	62·1	51·6	50·5	Christmas Day.
26	36·5	S	S	56·7	61·3	64·7	68·3	63·9	63·0	51·0	S	45·2
27	33·7	42·5	37·0	59·2	63·5	66·8	70·1	S	63·2	52·2	45·0	42·0
28	34·1	45·0	37·5	58·6	S	65·0	66·4	66·2	60·9	47·5	48·5	44·2
29	S		36·9	54·2	63·2	65·4	67·8	62·3	62·1	S	48·2	47·8
30	36·4		37·0	S	62·8	63·6	S	61·5	61·9	49·7	46·2	43·4
31	39·5		41·8		62·5		66·5	62·8		49·5		S
Means.	38·8	38·9	39·3	53·3	57·8	64·4	66·1	62·5	65·6	54·7	47·5	45·1

(VI.)—Reading of a Thermometer within the case covering the deep-sunk Thermometers, whose bulb is placed on a level with their scales, at the same times.

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	S	45·2	46·2	52·8	58·8	69·5	62·5	58·6	66·1	S	43·7	47·7
2	31·3	49·8	47·8	S	64·0	59·1	S	60·0	75·7	73·2	49·2	45·3
3	33·9	47·7	45·5	53·8	68·5	65·4	75·4	53·3	S	71·1	47·0	S
4	47·4	36·2	45·2	50·3	58·4	S	79·9	58·1	79·4	61·9	42·5	49·1
5	46·2	S	S	56·5	67·0	73·3	77·2	69·6	74·5	67·6	S	47·5
6	41·5	38·2	40·3	59·4	68·6	76·7	77·4	S	75·4	66·9	45·2	49·0
7	40·9	44·8	40·2	60·0	S	73·9	70·9	68·9	79·6	65·5	44·5	51·4
8	S	37·7	40·7	63·7	64·2	71·5	71·0	67·4	82·7	S	50·9	48·5
9	46·6	38·3	42·2	S	66·5	80·0	S	71·0	75·0	65·7	49·3	47·1
10	49·9	36·2	40·5	68·3	51·2	64·8	68·9	71·1	S	65·9	49·0	S
11	46·7	32·1	42·5	67·3	48·7	S	68·5	67·8	72·2	62·9	44·8	45·8
12	45·9	S	S	64·3	56·5	66·4	66·5	67·8	76·3	61·7	S	42·9
13	39·4	30·3	42·9	67·7	60·4	72·2	62·3	S	77·7	61·7	49·5	39·2
14	42·3	32·1	41·3	Good Friday.	S	73·2	72·0	67·7	77·8	61·2	47·3	40·2
15	S	30·3	37·0	51·3	55·4	72·6	79·8	66·4	80·5	S	50·5	39·4

(VI.)—Reading of a Thermometer within the case covering the deep-sunk Thermometers—*concluded.*

Days of the Month, 1865.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
16	40 ·8	35 ·5	44 ·4	*S*	59 ·9	67 ·1	*S*	67 ·0	82 ·6	55 ·7	46 ·7	38 ·8
17	36 ·6	37 ·8	43 ·2	67 ·3	61 ·0	72 ·2	76 ·0	68 ·2	*S*	61 ·4	54 ·0	*S*
18	35 ·7	42 ·8	41 ·0	63 ·0	62 ·7	*S*	68 ·6	66 ·1	75 ·6	53 ·9	46 ·4	42 ·1
19	36 ·3	*S*	*S*	55 ·7	68 ·5	58 ·9	68 ·5	69 ·4	75 ·2	45 ·8	*S*	46 ·0
20	35 ·3	36 ·2	36 ·7	60 ·1	73 ·7	73 ·7	71 ·4	*S*	76 ·4	52 ·1	55 ·0	46 ·4
21	34 ·1	34 ·5	40 ·0	68 ·0	*S*	80 ·6	74 ·0	70 ·7	59 ·8	45 ·0	54 ·0	49 ·5
22	*S*	39 ·2	40 ·6	72 ·6	72 ·8	73 ·3	68 ·3	72 ·0	66 ·5	*S*	53 ·4	41 ·0
23	34 ·5	48 ·4	41 ·0	*S*	74 ·8	80 ·9	*S*	63 ·2	66 ·9	48 ·7	50 ·2	42 ·0
24	35 ·3	45 ·8	40 ·5	66 ·6	66 ·0	72 ·3	75 ·9	69 ·9	*S*	56 ·4	54 ·3	*S*
25	33 ·8	45 ·9	42 ·2	65 ·0	69 ·8	*S*	76 ·8	69 ·6	73 ·9	55 ·0	53 ·1	Christmas Day
26	34 ·9	*S*	*S*	70 ·0	73 ·0	65 ·6	75 ·7	71 ·6	74 ·9	52 ·5	*S*	47 ·4
27	36 ·2	47 ·2	39 ·4	75 ·8	73 ·2	73 ·2	81 ·9	*S*	77 ·5	56 ·3	45 ·7	36 ·0
28	32 ·7	50 ·0	42 ·8	71 ·7	*S*	72 ·1	71 ·0	70 ·6	68 ·4	46 ·0	47 ·9	45 ·0
29	*S*		37 ·0	56 ·0	69 ·4	68 ·1	75 ·6	61 ·8	69 ·0	*S*	47 ·1	49 ·5
30	37 ·5		43 ·1	*S*	68 ·3	66 ·2	*S*	67 ·3	68 ·2	49 ·3	46 ·5	43 ·0
31	43 ·2		54 ·5		70 ·0		70 ·8	70 ·5		49 ·0		*S*
Means .	39 ·2	40 ·1	42 ·2	62 ·8	64 ·9	70 ·9	72 ·6	66 ·9	74 ·2	58 ·2	48 ·8	44 ·8

WEEKLY MEANS of READINGS of THERMOMETERS.								
Thermometers sunk in the ground.								Thermometer inclosed in the box which covers the scales of the deep-sunk Thermometers, and placed on a level with their scales.
1865. Period.			Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	
	d	d	°	°	°	°	°	°
January	1 to	January 7	51·62	49·62	46·14	41·28	39·1	40·2
	8 to	14	51·51	49·03	45·68	42·23	43·8	45·1
	15 to	21	51·33	48·44	45·51	41·66	37·6	36·5
	22 to	28	51·15	48·02	44·82	39·80	35·1	34·6
	29 to	February 4	50·99	47·47	...	40·30	41·0	43·3
February	5 to	11	50·77	46·92	...	40·59	39·1	37·9
	12 to	18	50·57	46·56	...	39·50	34·4	34·8
	19 to	25	50·39	46·24	...	...	39·3	41·7
	26 to	March 4	50·20	45·77	...	40·62	42·9	47·0
March	5 to	11	49·92	45·51	...	40·52	39·8	41·1
	12 to	18	49·72	45·39	...	40·21	39·8	41·6
	19 to	25	49·51	45·25	...	39·55	37·2	40·2
	26 to	April 1	49·32	45·08	...	...	39·3	34·9
April	2 to	8	49·17	44·88	...	41·89	49·7	57·3
	9 to	15	49·01	44·82	44·88	46·09	52·7	63·8
	16 to	22	48·86	45·11	46·46	48·55	55·6	64·4
	23 to	29	48·70	45·63	48·20	51·24	56·5	67·5
	30 to	May 6	48·56	46·31	49·54	51·83	57·2	64·2
May	7 to	13	48·46	46·98	50·54	52·57	53·5	57·9
	14 to	20	48·40	47·67	51·05	52·18	55·8	63·5
	21 to	27	48·40	48·23	51·90	55·13	62·2	71·6
	28 to	June 3	48·41	48·80	53·34	57·11	61·8	66·9
June	4 to	10	48·47	49·53	54·49	58·26	65·4	73·4
	11 to	17	48·55	50·26	55·63	59·50	62·4	70·6
	18 to	24	48·67	51·01	56·44	60·17	64·9	73·3
	25 to	July 1	48·80	51·69	57·37	61·39	64·3	67·9
July	2 to	8	48·98	52·39	57·94	61·41	67·2	75·3
	9 to	15	49·16	52·97	58·66	61·94	64·2	69·7
	16 to	22	49·36	53·56	59·10	62·45	65·7	71·1
	23 to	29	49·61	54·11	59·59	63·36	68·1	76·1
	30 to	August 5	49·80	54·51	60·13	62·69	59·8	61·7
August	6 to	12	50·05	55·05	59·81	61·49	63·9	69·0
	13 to	19	50·30	55·34	59·73	61·40	62·4	67·5
	20 to	26	50·54	55·61	59·79	61·63	64·0	69·5
	27 to	September 2	50·79	55·81	60·01	61·91	63·7	68·7
September	3 to	9	51·05	56·09	59·25	63·10	68·5	77·8
	10 to	16	51·27	56·33	60·93	64·23	68·3	77·8
	17 to	23	51·45	56·58	61·29	63·92	63·7	70·1
	24 to	30	51·66	56·90	61·03	62·09	62·2	72·0
October	1 to	October 7	51·84	57·03	60·50	61·04	59·4	67·7
	8 to	14	52·04	57·10	59·74	59·35	58·3	63·2
	15 to	21	52·17	56·80	58·79	57·16	51·7	52·3
	22 to	28	52·36	56·70	57·04	53·82	50·8	52·5
	29 to	November 4	52·55	56·25	55·65	51·83	46·4	46·8
November	5 to	11	52·67	55·71	54·21	49·63	45·7	47·3
	12 to	18	52·77	55·06	52·97	48·84	46·8	49·1
	19 to	25	52·85	54·39	52·30	49·75	51·9	53·3
	26 to	December 2	52·87	53·74	52·04	49·14	46·6	46·7
December	3 to	9	52·88	53·30	51·46	48·29	48·1	48·8
	10 to	16	52·81	52·81	51·08	47·81	42·6	41·1
	17 to	23	52·74	52·40	50·24	46·36	45·0	44·5
	24 to	31	52·64	51·90	49·59	45·92	44·5	44·2

Abstract of the Changes of the Direction of the Wind, as derived from Osler's Anemometer.

By *direct* motion, in the following statements, is meant that the change of the direction of the wind was in the order N., E., S., W., N., &c., by *retrograde* is meant in the order N., W., S., E., N., &c.

1864. Dec. $\overset{d}{31}$. $\overset{h}{12}$. The direction of the wind was E.N.E.
1865. Jan. 31. 12. ,, ,, W.S.W., which implies a retrograde motion of 180°.
On Jan. 2. 3, the trace was shifted to the next set of lines downwards; on Jan. 12^{d}. 22^{h}, 21^{d}. 22^{h}, 23^{d}. 22^{h}, the trace was shifted to the next set of lines upwards, implying direct motion of 360°, and retrograde motion of 1080°.
Therefore the whole excess of retrograde motion in the month of January was 900°.

1865. Jan. $\overset{d}{31}$. $\overset{h}{12}$. The direction of the wind was W.S.W.
Feb. 28. 12. ,, ,, W., which implies a direct motion of $22\frac{1}{2}$°.
On Feb. 3. 22, the trace was shifted to the next set of lines upwards; on Feb. 5^{d}. 22^{h}, 15^{d}. 22^{h}, 27^{d}. 4^{h}, the trace was shifted to the next set of lines downwards, implying retrograde motion of 360°, and direct motion of 1080°.
Therefore the whole excess of direct motion in the month of February was $742\frac{1}{2}$°.

1865. Feb. $\overset{d}{28}$. $\overset{h}{12}$. The direction of the wind was W.
March 31. 12. ,, ,, S., which implies a retrograde motion of 90°.
On March 5. 22, the trace was shifted to the next set of lines upwards; on March 30^{d}. 22^{h}, the trace was shifted to the next set of lines downwards, implying retrograde motion of 360°, and direct motion of 360°.
Therefore the whole excess of retrograde motion in the month of March was 90°.

1865. March $\overset{d}{31}$. $\overset{h}{12}$. The direction of the wind was S.
April 30. 12. ,, ,, E., which implies a direct motion of 270°.
On April 10. 23, 11^{d}. 3^{h}, 11^{d}. 3^{h}. 40^{m}, 16^{d}. 22^{h}, 25^{d}. 22^{h}, 26^{d}. 22^{h}, the trace was shifted to the next set of lines downwards; on April 18^{d}. 22^{h}, the trace was shifted to the next set of lines upwards, implying direct motion of 2160°, and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of April was 2070°.

1865. April $\overset{d}{30}$. $\overset{h}{12}$. The direction of the wind was E.
May 31. 12. ,, ,, S.S.W., which implies a retrograde motion of $247\frac{1}{2}$°.
On May 6. 22, 9^{d}. 22^{h}, 19^{d}. 22^{h}, 21^{d}. 2^{h}, the trace was shifted to the next set of lines upwards; on May 0^{d}. 22^{h}, 7^{d}. 22^{h}, 8^{d}. 22^{h}, 15^{d}. 0^{h}. 30^{m}, 18^{d}. 22^{h}, 21^{d}. 9^{h}. 30^{m}, the trace was shifted to the next set of lines downwards, implying retrograde motion of 1440°, and direct motion of 2160°.
Therefore the whole excess of direct motion in the month of May was $472\frac{1}{2}$°.

1865. May $\overset{d}{31}$. $\overset{h}{12}$. The direction of the wind was S.S.W.
June 30. 12. ,, ,, N.N.E., which implies a direct motion of 180°.
On June 4. 22, 7^{d}. 2^{h}. 30^{m}, 12^{d}. 22^{h}, 13^{d}. 22^{h}, 22^{d}. 22^{h}, 27^{d}. 22^{h}, 29^{d}. 22^{h}, the trace was shifted to the next set of lines downwards; and on June 21^{d}. 3^{h}. 15^{m}, to the second set of lines downwards; on June 22^{d}. 3^{h}, the trace was shifted to the next set of lines upwards, implying direct motion of 3240°, and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of June was 3060°.

1865. June $\overset{d}{30}$. $\overset{h}{12}$. The direction of the wind was N.N.E.
July 31. 12. ,, ,, N., which implies a retrograde motion of $22\frac{1}{2}$°.
On July 17. 3. 20^{m}, 22^{d}. 3^{h}. 30^{m}, 31^{d}. 9^{h}. 40^{m}, the trace was shifted to the next set of lines downwards; on July 21^{d}. 22^{h}, the trace was shifted to the next set of lines upwards, implying direct motion of 1080° and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of July was $697\frac{1}{2}$°.

1865. July $31^{d}.\ 12^{h}$. The direction of the wind was **N.**
Aug. 31. 12. ,, ,, **W.**, which implies a retrograde motion of 90°.
On Aug. 4. 22, $19^{d}.\ 2^{h}.\ 30^{m}$, $19^{d}.\ 9^{h}.\ 30^{m}$, $22^{d}.\ 22^{h}$, $24^{d}.\ 21\frac{1}{2}^{h}$, $26^{d}.\ 3^{h}.\ 20^{m}$, $30^{d}.\ 22^{h}$, the trace was shifted to the next set of lines downwards; on Aug. $9^{d}.\ 0^{h}$, $23^{d}.\ 9^{h}.\ 40^{m}$, the trace was shifted to the next set of lines upwards, implying direct motion of 2520°, and retrograde motion of 720°.
Therefore the whole excess of direct motion in the month of August was 1710°.

1865. Aug. $31^{d}.\ 12^{h}$. The direction of the wind was **W.**
Sept. 30. 12. ,, ,, **E.N.E.**, which implies a direct motion of $157\frac{1}{2}$°.
On Sept. 12. 3. 10^{m}, $14^{d}.\ 22^{h}$, $20^{d}.\ 3^{h}.\ 15^{m}$, the trace was shifted to the next set of lines downwards; on Sept. $14^{d}.\ 9^{h}.\ 30^{m}$, the trace was shifted to the next set of lines upwards, implying direct motion of 1080°, and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of September was $877\frac{1}{2}$°.

1865. Sept. $30^{d}.\ 12^{h}$. The direction of the wind was **E.N.E.**
Oct. 31. 12. ,, ,, **N.**, which implies a retrograde motion of $67\frac{1}{2}$°.
On Oct. 8. 0. 40^{m}, the trace was shifted to the next set of lines downwards; on Oct. $18^{d}.\ 3^{h}.\ 30^{m}$, $22^{d}.\ 0^{h}.\ 50^{m}$, the trace was shifted to the next set of lines upwards, implying direct motion of 360°, and retrograde motion of 720°.
Therefore the whole excess of retrograde motion in the month of October was $427\frac{1}{2}$°.

1865. Oct. $31^{d}.\ 12^{h}$. The direction of the wind was **N.**
Nov. 30. 12. ,, ,, **N.**, which implies no change.
On Nov. 2. 3. 10^{m}, $4^{d}.\ 22^{h}$, $13^{d}.\ 2^{h}.\ 40^{m}$, $28^{d}.\ 22^{h}$, the trace was shifted to the next set of lines downwards; on Nov. $27^{d}.\ 22^{h}$, the trace was shifted to the next set of lines upwards, implying direct motion of 1440°, and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of November was 1080°.

1865. Nov. $30^{d}.\ 12^{h}$. The direction of the wind was **N.**
Dec. 31. 12. ,, ,, **E.**, which implies a retrograde motion of 270°.
On Dec. 1. 2. 30^{m}, the trace was shifted to the next set of lines downwards, implying direct motion of 360°.
Therefore the whole excess of direct motion in the month of December was 90°.

The whole excess of direct motion to the end of the year was $9382\frac{1}{2}$°.

The revolution-counter which is attached to the vertical spindle of the vane, whose readings increase with change of direction of the wind in the order **N.**, **E.**, **S.**, **W.**, &c., or in *direct* motion, and decrease with change of direction in the order **N.**, **W.**, **S.**, **E.**, &c., or in *retrograde* motion, gave the following readings:—

	revs.
On 1864, December $31^{d}.\ 12^{h}$	17·20
On 1865, December $31^{d}.\ 12^{h}$	43·25

Implying an excess of direct motion, during the year, of 26 05 revolutions, or 9378°.

AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1865.

1865, MONTH.	Monthly Amount of Rain collected in each Gauge.							
	Self-registering Gauge of Osler's Anemometer.	Second Gauge at Osler's Anemometer.	On the Roof of the Octagon Room.	On the Roof of the Library.	On the Roof of the Photographic Thermometer Shed.	Crosley's.	Cylinder partly sunk in the Ground read daily.	Cylinder partly sunk in the Ground read Monthly.
	in.	in.	in.	in.	in.	in.	in.	in.
January	1·73	1·70	2·25	2·63	3·31	2·76	3·32	3·34
February	0·82	0·78	1·02	1·32	1·56	1·61	1·75	1·90
March	0·26	0·23	0·52	0·57	0·79	0·86	0·85	0·88
April	0·24	0·27	0·32	0·33	0·37	0·41	0·40	0·38
May	3·47	3·50	3·86	4·10	4·32	3·90	4·37	4·20
June	1·96	1·97	2·19	2·27	2·38	2·35	2·45	2·20
July	1·79	1·78	1·95	2·10	2·25	2·13	2·27	2·18
August	3·06	3·15	3·40	3·58	3·80	3·48	3·97	3·96
September	0·09	0·09	0·10	0·17	0·16	0·18	0·16	0·16
October	4·02	4·14	4·77	5·30	5·79	5·00	5·90	6·00
November	1·23	1·29	1·45	1·41	2·18	2·23	2·39	2·45
December	0·35	0·39	0·37	0·42	0·81	0·81	0·87	0·90
Sums	19·02	19·29	22·20	24·20	27·72	25·72	28·70	28·55

The heights of the receiving surfaces are as follows:

	Above the Mean Level of the Sea. Ft.	In.	Above the Ground. Ft.	In.
The Two Gauges at Osler's Anemometer	205	6	50	8
Gauge on the Roof of the Octagon Room	193	2½	38	4½
Gauge on the Roof of the Library	177	2	22	4
Gauge on the Roof of the Photographic Thermometer Shed	164	10	10	0
Crosley's Gauge	156	6	1	8
The Two Cylinder Gauges partly sunk in the Ground	155	3	0	5

ROYAL OBSERVATORY, GREENWICH.

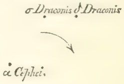
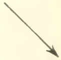
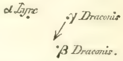
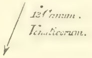
OBSERVATIONS

OF

LUMINOUS METEORS.

1865.

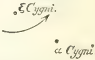
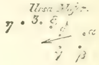
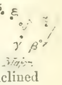
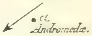
OBSERVATIONS OF LUMINOUS METEORS

Month and Day, 1865.		Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
		h m s					°	
January	0	12. 3. 30	= 2nd Mag. ✳	Bluish-white	. . .	No train	. .	Inclined
January	15	11. 54. 0	= 1st Mag. ✳	Brilliant	Less than 1 s.	No train	15	Inclined
February	10	6. 40. 0	= Mars	Blue	. . .	Faint train	25	Perpendicular
February	17	10. 4. 0	= 3rd Mag. ✳	Blue	½ second	No train	. .	
April	8	9. 49. 0	= 2nd Mag. ✳	White	. . .	No train	. .	. . .
April	15	11. 25. 0	= 2nd Mag. ✳	Blue	Less than 1 s.	No train	12	Inclined
April	20	10. 21. 0	= 1st Mag. ✳	Bluish-white	Momentary	A flash only	1	Northwards
	,,	10. 27. 0	= 4th Mag. ✳	Blue	Less than 1 s.	No train	15	Nearly horizontal
	,,	10. 35. 0	= 3rd Mag. ✳	Bluish-white	Less than 1 s.	No train	15	Almost perpendicular
	,,	10. 46. 0	= 1st Mag. ✳	Brilliant white	. . .	Slight train	6	Horizontal
	,,	10. 57. 0	= 1st Mag. ✳	Bright blue	Less than 1 s.	Slight train	10 to 12	
May	1	9. 40. 0	= 1st Mag. ✳	Bluish-white	½ second	Faint train	10 ±	Perpendicular
	,,	10. 30. 0	= 2nd Mag. ✳	Blue	Less than 1 s.	. . .	8 to 10	Inclined
	,,	10. 31. 0	= 1st Mag. ✳	Bright blue	0·7 second	Train	16	Horizontal
May	6	11. 53. 0	> 1st Mag. ✳	Bright	About 1 s.	Fine train	25	Inclined
June	7	12. 8. 0	= Venus	Yellowish-white	2 seconds	Train	40 ±	Perpendicular
July	19	10. 26. 0±	= 2nd Mag. ✳	Blue	Less than 1 s.	No train	10 or 12	Inclined
	,,	10. 32. 0	= Capella	Bluish-white	Less than 1 s.	Fine train	20	. . .
August	9	11. 37. 0	= 2nd Mag. ✳	Bluish-white	½ second	No train	15	. . .
August	11	9. 41. 15	= 4th Mag. ✳	Blue	¾ second	No train	8	Inclined
	,,	9. 48. 0±	= 3rd Mag. ✳	Reddish	Less than 1 s.	No train	10	Inclined
	,,	9. 48. 10	= 3rd Mag. ✳	Bluish-white	½ second	No train	7	Inclined
	,,	9. 51. 45	= 4th Mag. ✳	Bluish-white	Less than 0·5 s.	No train	2	
	,,	10. 0. 5	= 4th Mag. ✳	Bluish-white	Less than 1 s.	No train	12	Slightly inclined from hor.
	,,	10. 1. 5	= 4th Mag. ✳	Bluish-white	Rapid motion	No train	10	Perpendicular
	,,	10. 7. 30	= 1st Mag. ✳	Blue	More than 1 s.	Fine train, 1 s.	25	From the direction of β Pegasi
	,,	10. 10. 30	= 1st Mag. ✳	Bluish-white	1 second	Fine train	. .	
	,,	10. 19. 15	= 1st Mag. ✳	Bluish-white	1 second	Fine train	. .	Almost perpendicular in W.
	,,	10. 19. 42	= 1st Mag. ✳	Bluish-white	1 second	Fine train	. .	. . .
	,,	10. 21. 30	= 2nd Mag. ✳	Bluish-white	½ second	Small train	. .	. . .
	,,	10. 23. 41	= 1st Mag. ✳	Bluish-white	1 second	Train	12	. . .
	,,	10. 31. 30	= 2nd Mag. ✳	Bluish-white	1 second	Fine train	. .	
	,,	10. 33. 34	= 1st Mag. ✳	Bluish-white	1 second	Train	10	. . .

in the YEAR 1865.

Position, or Altitude and Azimuth	Remarks.	Observer.
From direction of β Geminorum, passed between η and α Leonis.	Partially clear	N.
From a point a few degrees from η Leonis, towards α Cancri.	Above the Moon	N.
From space midway between Ursa Major and Gemini, vertically down.	Full Moon, hazy	N.
From a point $\frac{1}{3}$rd of the distance from σ Draconis towards α Cephei, curved below δ Draconis.	Faint Aurora	N.
		A. H.
Across α Draconis to γ Draconis.	Bright moonlight	N.
From direction of χ to ι Ursæ Majoris.	. . .	N.
Altitude 51½°, point of appearance 10° W. of Polaris.	Very brilliant, disappeared instantaneously.	N.
From the direction of β Ursæ Minoris, passed across o Ursæ Majoris. Point of appearance 5° W. of preceding meteor.	. . .	N.
From the direction of β Ursæ Minoris, fell almost perpendicularly towards N horizon. Point of appearance 7° E. of Polaris (same altitude).	. . .	N.
Between Coma Berenices and 12 Canum Venaticorum.	. . .	N.
From θ Ursæ Majoris towards W. horizon.	. . .	N.
From direction of α Ursæ Majoris, disappeared near τ Ursæ Majoris.	. . .	N.
From direction of α Lyræ, disappeared near α Cephei.	. . .	N.
From ν Draconis, passed horizontally a few degrees above α Lyræ.	. . .	N.
From a point between α Cygni and o Cygni, passed towards zenith across λ Lyræ, disappearing 1° or 2° beyond that star.	. . .	N.
From a point a little below δ Draconis fell vertically across β Cephei and γ Cassiopeiæ, and disappeared 5° beyond the latter star.	Very brilliant	N.
Appeared midway between δ Ursæ Majoris and α Draconis, moved rapidly towards Capella.	Path parallel to a line joining δ and α Ursæ Majoris.	N.
From a little below ε Ursæ Majoris to ψ Ursæ Majoris.	Scintillated considerably, and disappeared very suddenly.	N.
Across Draco towards α Lyræ.	. . .	N.
From the direction of μ Boötis to a point North of ρ Boötis.	A fine clear night	A. H.
From a point North of γ Boötis to a point near D Boötis.	. . .	A. H.
From a point midway between γ and δ Boötis to ψ Boötis.	. . .	N.
Between γ and β Draconis.	. . .	N.
From the vicinity of σ Cygni, disappeared near γ Cygni.	. .	N.
Fell vertically through Equuleus towards horizon.	. . .	N.
Passed across Delphinus and α Aquilæ to a point 5° beyond the latter star.	A very brilliant meteor	N.
In N.N.W., altitude 60°, directed towards West.	. . .	E. J.
From a point 10° below α Lyræ, passed across γ Ophiuchi.	Very brilliant	N.
From the zenith in the vicinity of η Draconis to a point 12° West of η Ursæ Majoris.	Very brilliant meteor	N.
From the direction of Coma Berenices, disappeared near ε Boötis.	. . .	E. J.
Moved rapidly from a point 6° below η Ursæ Majoris towards Arcturus.	. . .	N.
From a point 5° West of 12 Canum Venaticorum towards W. horizon, disappeared at altitude 10° ±.	. . .	E. J.
From the direction of γ Persei towards o Ursæ Majoris. Center of path midway between those stars.	. . .	N.

OBSERVATIONS of LUMINOUS METEORS

Month and Day. 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
August 11	10. 40. 15	= 3rd Mag. *	Blue	More than 1 s.	No train	15	Inclined
„	10. 47. 15	= 2nd Mag. *	Bluish-white	1 second	Slight train	25	Nearly horizontal
„	10. 52. 0	= 4th Mag. *	Blue	½ second	No train	5	Perpendicular
„	10. 58. 45	= 3rd Mag. *	Blue	Rapid motion	No train	7	Inclined
„	11. 1. 45	= 1st Mag. *	Blue	More than 1 s.	No train	20	. . .
„	11. 6. 30	= 3rd Mag. *	White	Momentary	No train	10	Almost perpendicular
„	11. 10. 15	= 2nd Mag. *	Blue	½ second	No train	12	Inclined
„	11. 17. 45	= 2nd Mag. *	Blue	Slow motion	. . .	. .	
„	11. 26. 0	= 1st Mag. *	Bluish-white	1 second	Train	20	Nearly perpendicular
„	11. 27. 30	= 1st Mag. *	Blue	1½ second	Train	15	Inclined
„	11. 33. 30	= 1st Mag. *	Bluish-white	1 second	Train	10	Inclined
„	11. 39. 47	= 3rd Mag. *	Bluish-white	Less than 1 s.	No train	17	
„	11. 40. 0	= 2nd Mag. *	Blue	¾ second	No train	12	
August 12	11. 31. 0	= 2nd Mag. *	Bluish-white	Rapid motion	No train	. .	Almost perpendicular
„	11. 36. 0	= 1st Mag. *	Bluish	½ second	Slight train	15	Inclined
August 13	10. 2. 15	= 2nd Mag. *	Blue	1 second	No train	5	Almost perpendicular
„	10. 6. 0	= 3rd Mag. *	Blue	¾ second	No train	. .	Perpendicular
„	11. 30. 50	= 1st Mag. *	Bluish-white	1 second	Train	5	Almost perpendicular
August 14	10. 23. 0	. . .	Bluish-white	1 second	Fine train	. .	. . .
August 17	9. 12. 0	= 3rd Mag. *	Bluish-white	Less than 1 s.	No train	12	E. to W. nearly horizontal
August 21	9. 12. 18	= 2nd Mag. *	Blue	1½ second	No train	15	Almost perpendicular
August 22	8. 55. 30	= Venus	Blue	5 seconds	Faint train	. .	Nearly horizontal
„	8. 59. 0	= 4th Mag. *	White	½ second	No train	6	Perpendicular
August 25	8. 58. 30	= 2nd Mag. *	Brilliant blue	Rapid motion	No train	5	Inclined
„	9. 34. 0	= 1st Mag. *	White	1 second	No train	10	
„	9. 35. 30	= 2nd Mag. *	Blue	¾ second	No train	11	Inclined
„	9. 41. 0	= 4th Mag. *	Bluish-white	Rapid motion	No train	6	Nearly horizontal towards N.
„	10. 43. 30	= 3rd Mag. *	Blue	1 second	No train	10	Inclined
„	12. 6. 0	= 2nd Mag. *	Blue	½ second	No train	5	Inclined
August 26	9. 10. 0	= 2nd Mag. *	Blue	½ second	No train	7	Inclined
„	9. 35. 0	= 3rd Mag. *	Bluish-white	Rapid motion	No train	7	
„	9. 52. 30	= Venus	Blue	6 seconds	Slight train	20	Slightly inclined from perp.
„	10. 4. 0	= 3rd Mag. *	Blue	½ second	No train	5	. . .
„	10. 25. 0	= 4th Mag. *	Blue	Rapid motion	No train	10	Inclined
September 6	10. 0. 0	= 1st Mag. *	Bluish-white	Momentary	No train	. .	Inclined
September 14	9. 24. 30	= 4th Mag. *	White	Rapid motion	No train	6	. . .
„	9. 45. 0	= 2nd Mag. *	Blue	1 second	No train	8	Perpendicular
September 19	9. 28. 0	= 1st Mag. *	Blue	2 seconds	. . .	12	Nearly horizontal
September 20	9. 43. 0	= 1st Mag. *	Bluish-white	Rapid motion	. . .	8	Perpendicular
„	9. 44. 0	= 3rd Mag. *	Blue	½ second	. . .	10	Inclined
September 22	9. 30. 0	= 2nd Mag. *	Blue	1 second	No train	15	. . .
September 24	7. 48. 45	> Jupiter	Bluish-white	2 to 3 seconds	Faint train	30+	Path parallel to the ecliptic
„	8. 30. 0±	= 3 × Jupiter.	Flame colour	. . .	Train; sparks	. .	. . .
September 26	9. 0. 0	= 1st Mag. *	White	1 second	No train	10	Inclined
„	9. 18. 0	= Jupiter	Bluish-white	3 seconds	No train	25	Inclined
„	9. 21. 0	> Jupiter	Brilliant blue	5 seconds	No train	30	Inclined

in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
From the direction of κ Draconis to a point between α Draconis and η Ursæ Majoris.	. . .	A. H.
From a point between α Ursæ Majoris and Polaris to a point North of κ Draconis.	. . .	A. H.
From the direction of λ Boötis.	. . .	A. H.
Passed below ι Draconis from the direction of ι Ursæ Minoris.	. . .	A. H.
From the direction of γ Draconis to a point South of δ Cygni.	. . .	A. H.
From a point West of Polaris.	. . .	A. H.
From β Cygni towards α Ophiuchi.	. . .	A. H.
From a point East of ξ Cygni, curved between that star and α Cygni.	. . .	A. H.
From Cassiopeia towards Capella.	. . .	N.
From the direction of β Ursæ Minoris to a point between ι Draconis and η Ursæ Majoris.	Brilliant meteor	A. H.
From a point above Capella, disappeared 5° below β Aurigæ.	. . .	N.
From a point 5° West of α Ursæ Majoris, passed below δ Ursæ Majoris to a point about 7° below ε Ursæ Majoris.	. . .	N.
From the direction of λ Draconis, passed above ε Ursæ Majoris to a point below ζ Ursæ Majoris.	. . .	A. H.
Fell almost perpendicularly in the West, and disappeared near Corona Borealis.	Very cloudy	N.
From the direction of Sagitta, disappeared near ο Herculis.	. . .	N.
From the direction of ι Ursæ Minoris, passed between ι and α Draconis.	. . .	A. H.
Fell vertically from a point a little to the left of Arcturus.	. . .	A. H.
Fell almost perpendicularly in West from near γ Serpentis.	Bright meteor	N.
From a point a little below ζ Draconis to ι Draconis.	. . .	E. J.
In N.N.W. at altitude 20°.	Very cloudy; no stars discernible.	N.
From the zenith to a point 5° on the right of α Draconis.	. . .	N.
From a point near ψ Pegasi to β Trianguli.	Burst about 1 second before disappearance, throwing off a shower of sparks.	A. H.
Fell vertically from a point in the vicinity of α Persei.	. . .	A. H.
From the direction of ψ Cassiopeiæ to a point above ε Cassiopeiæ.	. . .	A. H.
From a point 2° East of α Ursæ Majoris, fell past β Ursæ Majoris towards horizon:—path parallel to line joining α and β Ursæ Majoris.	. . .	A. H.
From a point 2° left of η Ursæ Majoris towards ε Boötis.	. . .	A. H.
Passed between γ and ι Serpentis towards γ Boötis.	. . .	A. H.
Passed above α Coronæ Borealis towards α Serpentis.	. . .	A. H.
From direction of α Cephei, disappeared near γ Draconis.	. . .	N.
From the direction of η Ursæ Majoris to ε Boötis.	. . .	N.
Passed a few degrees above α Andromedæ towards γ Andromedæ.	Center of track α Andromedæ.	A. H.
From ι Cassiopeiæ, disappeared in the neighbourhood of α Persei.	. . .	A. H.
From the direction of β Cephei, disappeared near ε Coronæ Borealis.	. . .	N.
From the direction of σ Ursæ Minoris to a point above α Draconis.	. . .	A. H.
From a point about 5° above ζ Ursæ Majoris to a point as much beneath η Ursæ Majoris.	. . .	F. T. E. J.
Directed from Polaris to a point 2° below δ Persei.	. . .	A. H.
Fell perpendicularly from a point 3° East of γ Boötis.	. . .	A. H.
From a point about 2° below α Draconis towards α Ursæ Majoris.	. . .	A. H.
Fell vertically from a point about 3° East of α Aquilæ.	. . .	A. H.
From the direction of θ Coronæ Borealis to a point between ε and γ Boötis.	. . .	A. H.
From a point about 3° East of θ Pegasi to a point 2° above ε Pegasi.	. . .	A. H.
First seen near γ Aquarii, disappeared near α Capricorni.	Very bright meteor	N.
From above Arcturus towards North-West, disappeared below Ursa Major.	. . .	T. W.
From a point near φ Aquarii, passed midway between γ and δ Aquarii.	. . .	A. H.
Directed from Polaris to a point just below δ Ursæ Majoris.	. . .	A. H.
From a point about 3° East of ε Herculis, passed to the right of α Herculis, and disappeared in the neighbourhood of ι and κ Ophiuchi.	. . .	A. H.

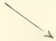
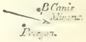
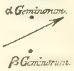
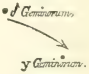
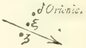
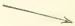
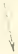
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
September 26	9. 54. 0	= 2nd Mag. ✳	White	1 second	No train	15	Nearly perpendicular
September 27	9. 35. 30	= 3rd Mag. ✳	White	Rapid motion	No train	12	Inclined
September 28	11. 11. 0	= 3rd Mag. ✳	Bluish-white	Less than 1$^{s.}$	No train	10	. . .
”	11. 22. 0	= 1st Mag. ✳	Blue	1 second	No train	12+	. . .
”	11. 46. 0	= 1st Mag. ✳	Bluish-white	½ second	Faint train	12	Perpendicular
September 29	6. 56. 0	= 1st Mag. ✳	Bluish-white	½ second	Train	8	Perpendicular
October 7	8. 38. 0	= 2nd Mag. ✳	Blue	½ second	. . .	8	Slightly inclined from hor.
October 12	9. 25. 0	= 2nd Mag. ✳	White	1 second	Faint train	15	Perpendicular
October 13	6. 30. 0±	= 2nd Mag. ✳	Blue	1½ second	Train	..	Curved slightly
October 19	10. 15. 0	= 2nd Mag. ✳	Bluish-white	Less than 1$^{s.}$	Train	6	Perpendicular
November 8	7. 26. 0+	= 2nd Mag. ✳	Yellow	Momentary	A flash	..	↖
November 9	7. 40. 30+	= 3rd Mag. ✳	Yellow	0·3 second	. . .	7	↙
”	9. 46. 45	= 4th Mag. ✳	Bluish	0·1 second	No train	2	Perpendicular
November 12	6. 2. 0	= 3rd Mag. ✳	Bluish-white	1 second	No train	3	↑
”	7. 44. 40	= 2nd Mag. ✳	Bluish-white	2 seconds	No train	7	Inclined
”	12. 12. 0	= 2nd Mag. ✳	White	2 seconds	. . .	35	S.E. to S.S.W., inclined 10° from horizontal.
”	12. 16. 38	= 2nd Mag. ✳	Yellow	. . .	Train	..	Fell vertically
”	12. 24. 35	> 2nd Mag. ✳	Bluish-white	2 seconds	Fine train	23	↘
”	12. 28. 15	= Jupiter	Yellow	3 seconds	Very fine train, 1½ second	25	In S., directed from E. to W. Inclined
”	12. 36. 0	= 4th Mag. ✳	Bluish	Momentary	. . .	2	Inclined about 30° from perp.
”	12. 40. 4	= 3rd Mag. ✳	Blue	Rapid motion	No train	6	Inclined
”	12. 40. 45	= 3rd Mag. ✳	Bluish-white	1 second	Faint train	12	Nearly horizontal
”	12. 41. 17	= 2nd Mag. ✳	Yellowish	1 second	Faint train	18	Inclined, slightly curved
”	12. 41. 30	= 2nd Mag. ✳	Bluish	Momentary	Small train	30	Perpendicular
”	12. 42. 0	= 3rd Mag. ✳	White	1$^{s.}$ to 2$^{s.}$	. . .	20	S.E. to S.S.W., inclined 15° from horizontal.
”	12. 42. 0	= 2nd Mag. ✳	Yellow	1 second	Train, 2$^{s.}$	..	. . .
”	12. 43. 0	Very small	Blue	1 second	No train	21	. . .
”	12. 43. 30	= 1st Mag. ✳	Bluish	About 2$^{s.}$	Fine train	30	Perpendicular
”	12. 44. 7	= 1st Mag. ✳	Bluish	2 seconds	Fine train, 1$^{s.}$	20	↘
”	12. 45. 0	= 3rd Mag. ✳	White	1$^{s.}$ to 2$^{s.}$	. . .	20	S.E. to S.S.W., inclined 15° from horizontal.
”	12. 45. 0	. . .	Yellow	2 seconds	No train	22	. . .
”	12. 46. 5	= 1st Mag. ✳	Reddish	2 seconds	Fine train, 1$^{s.}$	30	Inclined
”	12. 46. 17	= 1st Mag. ✳	Blue	½ second	No train	10	Perpendicular
”	12. 49. 0	= 2nd Mag. ✳	White	1$^{s.}$ to 2$^{s.}$	Train, 3$^{s.}$	25	Inclined 10° from perp.
”	12. 49. 0	. . .	Yellow	1^{s}, rapid motion	. . .	26	. . .
”	12. 49. 30	= 1st Mag. ✳	Bluish-white	1 second	Train	15	5° inclination from perp.
”	12. 53. 30	= 2nd Mag. ✳	Blue	2 seconds	Long train	20	Horizontal
”	12. 53. 50	= 2nd Mag. ✳	White	Less than 1^{s}.	Train	10	Inclined
”	12. 54. 18	= 1st Mag. ✳	Bluish	1 second	Fine train	10	↘
”	12. 54. 45	= 2nd Mag. ✳	Bluish	1 second	Train, momentary.	14	Curved towards horizon

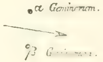
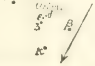
in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Directed from γ Draconis to η Herculis.	. . .	A. H.
Directed from α Aquilæ to a point a little West of α and β Capricorni.	. . .	A. H.
From the direction of ζ Cygni to a point near ζ Aquilæ.	. . .	N.
From the direction of ε Cygni, fell 5° below and beyond α Lyræ.	. . .	N.
Fell vertically in the North, from the direction of Polaris, disappearing at γ Ursæ Majoris.	. . .	N.
Fell perpendicularly in the West, from the direction of γ Boötis, disappeared at the same altitude as Arcturus.	. . .	N.
From the direction of ε Cassiopeiæ towards Polaris.	. . .	N.
Fell vertically from a point just below θ Draconis.	. . .	A. H.
Passed across ε Cassiopeiæ to a point 10° below Polaris.	Time correct to 1^{m} or 2^{m}	N.
From the direction of δ Cygni passed across λ Lyræ.	. . .	N.
Directed from a point about 3° above ο Herculis towards β Lyræ.	. . .	T. W.
From a point a little above and to the N. of α Coronæ Borealis towards horizon.	. . .	T. W.
Appeared near γ Eridani.	. . .	T. W.
Disappeared near δ Aurigæ.	The sky was perfectly clear from 6^{h}. to 8^{h}., yet five observers saw only the two meteors here recorded.	F. T.
From a point near ε Aurigæ, passed a little above Capella to a point nearly midway between Capella and δ Aurigæ.	Cloudy from 8^{h}. to midnight.	F. T.
From a point a little above α Orionis, passed midway between δ and γ Orionis towards Eridanus.	Cloudy	M. R.
In W.N.W.; no stars could be seen in the track of the meteor.	Cloudy	E. J.
Appeared near α Leporis, moved to γ Eridani.	Partially cloudy	N.
Across β Tauri, shot beneath the Pleiades (at a distance of 3°) towards the West.	Partially cloudy	J. G.
		N.
		A. H.
Appeared a few degrees W.S.W. of Sirius, moved towards S. horizon, disappearing a few degrees W. of β Canis Majoris.	Nearly clear	T. W.
Moved towards S.S.W. horizon, passing just below Sirius.	Clear	A. H.
In S. at altitude 16°, commenced near α Leporis, and moved 12° Westward.	. . .	N.
From near β Leporis curved towards S.W. horizon.	. . .	N.
From a point between β and μ Andromedæ, fell vertically towards horizon, passing within a few degrees of δ Andromedæ.	. . .	E. J.
Point of appearance η Orionis.	. . .	M. R.
Midway between Rigel and α Orionis towards Sirius.	. . .	J. G.
From α Andromedæ to α Pegasi.	. . .	J. G.
Appeared midway between β and μ Andromedæ, fell vertically towards horizon, passing close to δ Andromedæ.	This meteor was very similar to that at 12^{h}. 41^{m}. 30^{s}.	E. J.
From the vicinity of α Leporis, shot towards S.W. horizon.	. . .	N.
Point of appearance near β Orionis, directed towards Eridanus.	. . .	M. R.
From β Pegasi to γ Pegasi.	. . .	J. G.
From direction of λ Ursæ Majoris to Capella.	. . .	A. H.
From a point about 2° E. of λ Draconis, fell vertically towards ζ Ursæ Majoris.	. . .	F. T.
Center of track at β Orionis.		M. R.
From Castor to Procyon.	. . .	J. G.
Directed from Pleiades, disappeared near γ Eridani.	. . .	N.
Appeared near ψ Ursæ Majoris, passed midway between α and δ Ursæ Majoris, and disappeared a few degrees from R Draconis.	. . .	F. T.
From ψ Ursæ Majoris to a point midway between γ and β Ursæ Majoris.	. . .	A. H.
In S.E.—same altitude as Sirius, moved towards S. horizon.	. . .	N.
From λ Draconis towards ε Ursæ Majoris.	. . .	T. W.

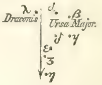
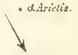
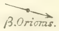
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	12. 55. 0	= 1st Mag. ✳	Bluish	About 2 s.	Fine train	8	Horizontal, E. to W.
,,	12. 59. 0	= 3rd Mag. ✳	White	0·5 second	No train	4	Horizontal
,,	12. 59. 10	= 2nd Mag. ✳	Blue	Rapid motion	No train	12	E. to W. Horizontal
,,	13. 0. 35	= 2nd Mag. ✳	Bluish-white	. . .	Faint train	7	
,,	13. 0. 50	= 1st Mag. ✳	Blue	1 second	Long train	20	Inclined slightly from hor.
,,	13. 0. 59	= Sirius	Blue	2 seconds	Very fine train	25	Inclined
,,	13. 1. 21	= 2nd Mag. ✳	Blue	1 second	No train	10	Perpendicular
,,	13. 1. 35	= 3rd Mag. ✳	Bluish	1 second	No train	7	
,,	13. 2. 18	= 2nd Mag. ✳	Blue	0·5 second	No train	7	Inclined
,,	13. 2. 45	= 2nd Mag. ✳	Bluish	2 seconds	No train	13	
,,	13. 3. 49	= 3rd Mag. ✳	White	0·2 second	No train	10	Inclined
,,	13. 4. 0	= 2nd Mag. ✳	Blue	1 second	Small train	8	
,,	13. 7. 15	= 2nd Mag. ✳	Blue	Rapid motion	Faint train	10	
,,	13. 7. 16	= 2nd Mag. ✳	Blue	1 second	No train	25	Inclined
,,	13. 10. 0	= 3rd Mag. ✳	Bluish-white	1½ second	Train	8	
,,	13. 10. 37	= 4th Mag. ✳	Blue	0·1 second	. . . .	15	. . .
,,	13. 10. 38	= 2nd Mag. ✳	Blue	½ second	No train	20	Inclined
,,	13. 10. 40	= 3rd Mag. ✳	Blue	Rapid motion	No train	10	Inclined
,,	13. 12. 10	= 2nd Mag. ✳	Blue	½ second	No train	12	Inclined
,,	13. 12. 38	= 4th Mag. ✳	White	1 second	No train	5	Inclined
,,	13. 14. 30	= 2nd Mag. ✳	White	2 seconds	Train 3 s.	12 +	
,,	13. 14. 35	= 3rd Mag. ✳	Blue	1 second	No train	12	
,,	13. 16. 24	= 5th Mag. ✳	Bluish	1 second	No train	3	Inclined
,,	13. 16. 45	= Procyon	Blue	2 seconds	Slight train	20	
,,	13. 16. 50	= 3rd Mag. ✳	Bluish	1 second	No train	6	Almost horizontal
,,	13. 17. 30	= 1st Mag. ✳	Rose	. . .	. . .	23	
,,	13. 17. 40	= 2nd Mag. ✳	Blue	1 second	Train	6	Horizontal E. to W.
,,	13. 17. 55	= 2nd Mag. ✳	Blue	. . .	Faint train	. .	
,,	13. 17. 59	= 2nd Mag. ✳	White	2 seconds	. . .	22	From S. to S. by E. Inclined 15° from perp.

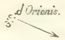
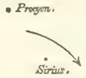
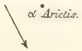
in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Passed a few degrees above Sirius.	. . .	E. J.
About 5° or 6° above S.E. horizon.	Trees intervening	T. W.
Passed below Sirius. Center of track immediately beneath that star.	. . .	A. H.
In S., from altitude 12° to altitude 5°. From direction of κ Orionis.	. . .	N.
Passed midway between α and β Geminorum, directed towards ν Geminorum.		F. T.
Directed from β Orionis towards W.S.W. horizon; disappeared at an altitude of 25°.	. . .	A. H.
From a point a little above and to the E. of δ Orionis, passed vertically between that star and ε Orionis.	. . .	F. T.
About 6° below the Pleiades.	. . .	T. W.
From β Canis Majoris towards S.W. horizon.	. . .	A. H.
3° below β Orionis.	. . .	T. W.
Passed below δ Leporis towards S.W. horizon.	. . .	A. H.
Passed between Procyon and β Canis Minoris.	. . .	F. T.
At altitude of 40°, directed towards W.N.W. horizon.	. . .	A. H.
From β Persei to a point about 3° to the left of γ Pegasi.	. . .	A. H.
Passed midway between α and β Geminorum, center of track between those stars.	. . .	F. T.
Inclined to N.W. horizon from direction of γ Arietis.	. . .	A. H.
From γ Pegasi towards N. horizon.	. . .	A. H.
From Aldebaran towards γ Arietis.	. . .	A. H.
From Aldebaran towards γ Eridani.	. . .	A. H.
From a point 1° below δ Leporis to a little below γ Leporis.	. . .	T. W.
From a point a little below δ Geminorum, curved to a point as much above γ Geminorum.	. . .	M. R.
Passed below ε Orionis, directed towards S.W. horizon.	. . .	F. T.
About 5° above N. horizon, just below ι Draconis.	. . .	T. W.
From a point about 8° below Procyon towards S.S.W. horizon.	. . .	A. H.
From about 5° below λ Draconis towards ε Ursæ Majoris.	. . .	T. W.
Commenced near ρ Orionis, passed between ι and β Orionis towards horizon.	. . .	M. R.
Passed midway between λ and γ Orionis, center of track midway between those stars.	. . .	F. T.
In S.S.E. at altitude 20°.	. . .	N.
Center of track a few degrees below β Orionis; path parallel to line of Orion's Belt.	. . . 	M. R.

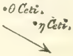
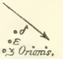
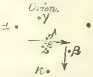
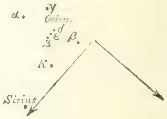
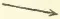
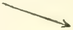
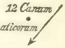
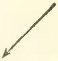
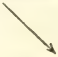
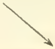
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	13. 18. 50	= Sirius	Blue	2 to 3 seconds	Wavy train, 2$^{s.}$	45	From E. to the zenith
,,	13. 20. 20	= 1st Mag. *	Blue	2 seconds	Fine train	6	Inclined
,,	13. 21. 10	= 3rd Mag. *	Bluish-white	1 to 2 seconds	. . .	16	S.E. to S.S.E. Inclined 5° from horizontal.
,,	13. 21. 27	= 1st Mag. *	Blue	2 seconds	Very fine train	30	 λ Draconis α β Ursa Major. δ γ ε ζ η
,,	13. 22. 37	= 2nd Mag. *	Blue	. . .	. . .	22	S.E. to S.S.E. Inclined 15° from horizontal.
,,	13. 24. 3	= 1st Mag. *	Blue	2 seconds	Train, 1$^{s.}$	25	Nearly perpendicular
,,	13. 24. 15	= 2nd Mag. *	Blue	1 second	Train	14	Inclined slightly from vertical.
,,	13. 25. 18	= 1st Mag. *	Blue	2 seconds	Train, 2$^{s.}$	35	Nearly perpendicular
,,	13. 25. 33	= Sirius	Blue	3 seconds	Fine train, 2$^{s.}$ or 3$^{s.}$	50	Perpendicular
,,	13. 26. 30	= 1st Mag. *	Bluish	1 second	Fine train	10	Curved
,,	13. 26. 39	= 1st Mag. *	Bluish	3 seconds	Fine train	35	Curved from α Geminorum
,,	13. 27. 45	= 1st Mag. *	Blue	. . .	Fine train	10	Inclined
,,	13. 28. 22	= 2nd Mag. *	Blue	1 to 2 seconds	. . .	25	Perpendicular
,,	13. 28. 25	= 3rd Mag. *	Blue	1 to 2 seconds	. . .	15	Perpendicular
,,	13. 29. 25	= 1st Mag. *	Bluish-white	Rapid motion	No train	20	Horizontal
,,	13. 30. 0	= 1st Mag. *	Blue	2 seconds	Long train	12	Horizontal
,,	13. 30. 0	= 3rd Mag. *	White	= 2 seconds	Fine train	20	Almost perpendicular
,,	13. 30. 50	= 1st Mag. *	Blue	1 second	Faint train	12	. . .
,,	13. 30. 54	= 1st Mag. *	White	2 to 3 seconds	Train, 3$^{s.}$	25	S.E. to S. by W. Inclined
,,	13. 31. 0	= 1st Mag. *	Blue	2 seconds	Fine train, 2$^{s.}$	20	Almost horizontal
,,	13. 31. 15	= 2nd Mag. *	Bluish-white	2 seconds	. . .	20	S. to S.S.W.
,,	13. 32. 16	= 2nd Mag. *	Bluish-white	2 to 3 seconds	. . .	25	S.E. to S. by E.
,,	13. 33. 36	= 1st Mag. *	Bluish-white	. . .	Train	40	
,,	13. 34. 18	= 3rd Mag. *	Bluish	1 second	No train	10	Inclined
,,	13. 35. 30	> 1st Mag. *	Brilliant blue	2 seconds	Fine train, 1$^{s.}$	37	Inclined
,,	13. 36. 0	= 1st Mag. *	Blue	1 second	Fine train	10	
,,	13. 37. 10	> 1st Mag. *	Blue	3 seconds	Fine train, 2$^{s.}$	15	Nearly perpendicular
,,	13. 37. 17	= 2nd Mag. *	Bluish-white	2 seconds	Train	30	S. by W. to S.W.
,,	13. 38. 10	= 1st Mag. *	Blue	1½ second	Train.	10	Inclined
,,	13. 39. 36	= Jupiter	Reddish	3 seconds	No train	5	Nearly perpendicular
,,	13. 41. 4	= 3rd Mag. *	Blue	. . .	Train	14	W. to E. inclined.

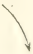
in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Appeared at an altitude of 40° (directed from Regulus), moved directly to the zenith to a point 5° N. of Capella.	A magnificent meteor.	N. A. H.
From a point near *b* Orionis, passed between λ and γ Orionis.	. . .	F. T.
From a point a little below and to the E. of ζ Orionis towards β Eridani.	. . .	M. R.
Appeared near λ Draconis (about 8° N. of α Ursæ Majoris), fell perpendicularly towards horizon, passing within 5° of ζ Ursæ Majoris.	. . .	N. F. T.
From a point near Procyon to a point a few degrees above Sirius.	. . .	M. R.
From direction of ε Tauri across β Arietis.	. . .	A. H.
From a point 1° or 2° N. of λ Draconis, fell almost perpendicularly towards horizon, disappearing about 6° North and below η Ursæ Majoris.	. . .	F. T.
Fell almost vertically from a point West of the Pleiades to γ Pegasi.	. . .	N. A. H. M. R.
Fell vertically from α Persei.	. . .	A. H.
From the direction of ξ Ursæ Majoris, curved between 12 and *m* Canum Venaticorum.	. . .	E. J.
Disappeared close to α Orionis.	Path much curved	T. W.
From a point in the vicinity of θ Ceti to a point a few degrees West of η Ceti.	Disappeared at altitude 8°	N.
Fell vertically from a point West and below η Tauri.	. . .	M. R.
Fell vertically from direction of η Tauri.	Path almost parallel to that of preceding meteor.	M. R.
From direction of Polaris towards α Cassiopeiæ.	. . .	A. H.
Passed a few degrees above *d* Canum Venaticorum, and midway between ε and ζ Ursæ Majoris.	. . .	F. T.
Fell towards horizon from the direction of β Ursæ Minoris, disappeared close to θ Draconis.	. . .	T. W. E. J.
From a point 2° N. of η Draconis towards γ Draconis.	. . .	A. H.
Appeared about 5° above α Orionis, passed about the same distance above δ Orionis towards γ Eridani.	Very brilliant	M. R.
Appeared 6° above α Orionis, and moved almost horizontally towards W. passing about 4° below Aldebaran.	. . .	N.
Directed from ε Orionis towards S.W. horizon.		M. R.
From a point midway between Procyon and Sirius, passed above Sirius towards S. horizon.		M. R.
From a point a little S. of α Arietis, directed towards horizon.	. . .	M. R.
From about 3° below Sirius, disappeared about 5° S. of δ Canis Majoris.	. . .	T. W.
From γ Cassiopeiæ to a point midway between η and β Pegasi.	. . .	A. H.
From ι Orionis, passed across β Orionis, center of track β Orionis.	. . .	N.
In W.S.W.; from direction of the Pleiades, across δ Arietis.	Slow motion	N.
From a point S. of α Arietis, directed towards horizon.		M. R.
From a point near η Ursæ Majoris to a point 4° below Polaris.	. . .	F. T.
From a point about 10° to the left of γ Pegasi, directed almost vertically towards horizon.	Moved very slowly	A. H.
From β Tauri to μ Geminorum.	. . .	N.

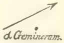
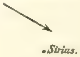
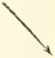
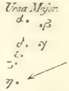
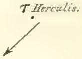
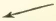
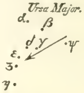
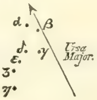
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance ; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction ; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	13. 41. 43	= 2nd Mag. ✳	Bluish-white	2 seconds	Faint streak	10	
,,	13. 41. 45	= 1st Mag. ✳	Blue	1 second	Fine train	12	
,,	13. 42. 6	= 2nd Mag. ✳	Bluish-white	2 seconds	Train, 3ˢ·	16	
,,	13. 42. 13	> Sirius	Blue	2 seconds	Fine train	15	Inclined
,,	13. 42. 58	> 1st Mag. ✳	Blue	1 second	Fine train	20	
,,	13. 42. 58	= 1st Mag. ✳	Blue	1 second	Fine train	10	Inclined 5° from perp.
,,	13. 43. 52	= 2nd Mag. ✳	White	2 seconds	Train	25	
,,	13. 43. 52	= 3rd Mag. ✳	White	3 seconds	. . .	23	
,,	13. 45. 59	= 1st Mag. ✳	Red	2 seconds	Enlarging until disappearance.	40	S.S.W. to S.W. Inclined 40°.
,,	13. 46. 50	= 2nd Mag. ✳	Blue	Rapid motion	No train	20	Inclined
,,	13. 47. 0	= 1st Mag. ✳	Bluish	1 second	Fine train	12	
,,	13. 48. 55	= 1st Mag. ✳	White	2 to 3 seconds	. . .	30	S.S.W. to S.W. Inclined
,,	13. 49. 2	= 1st Mag. ✳	Yellow	5 seconds	Fine train, pink.	50	
,,	13. 50. 53	= 3rd Mag. ✳	Blue	1 to 2 seconds	Slight train	10	
,,	13. 50. 56	= 2nd Mag. ✳	White	1 second	No train	8	
,,	13. 51. 30	= 2nd Mag. ✳	Bluish-white	1 second	Small train	6	Inclined slightly from hor.
,,	13. 52. 17	= 2nd Mag. ✳	Bluish-white	1 to 2 seconds	. . .	40	
,,	13. 52. 25	> 1st Mag. ✳	Blue	1 second	Faint train	25	Inclined
,,	13. 53. 0	= 1st Mag. ✳	Blue	2 seconds	Fine train, 2ˢ·	25	
,,	13. 54. 35	= 1st Mag. ✳	Blue	1 second	No train	15	Inclined.
,,	13. 54. 45	= 2nd Mag. ✳	Blue	1 second	No train	13	Inclined slightly from hor.
,,	13. 55. 20	= 2nd Mag. ✳	White	2 seconds	. . .	20	

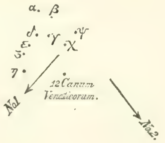
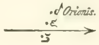
in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Towards S.S.W. horizon from λ Tauri.	. . .	A. H.
From a point a few degrees below θ Ceti, passed towards W.S.W. horizon below η Ceti; center of track opposite η Ceti.	. . .	N.
Center of track a few degrees above δ Orionis; from direction of α Orionis towards μ Eridani.	. . .	M. R.
From a point midway between ζ Orionis and Sirius to α Leporis.	. . .	A. H.
Passed midway between δ and ε Orionis towards West; center of track δ Orionis.	These meteors appeared at the same instant and pursued paths exactly at right angles (*See* diagram.)	N.
From a point about 2° E. of β Orionis, fell towards horizon nearly vertically.	. . .	N. A. H.
From a point close to β Orionis to a point a little below Sirius.	These meteors appeared *simultaneously* nearly at the same spot, and pursued paths exactly at right angles.	M. R.
See the sketch and following note.	. . .	M. R.
From a point near Aldebaran towards S.W. horizon.		M. R.
Directed from Sirius towards S.S.W. horizon.	. . .	A. H.
Center of path about 2° below the Pleiades.	. . .	E. J.
From a point just below η Tauri towards horizon.		M. R.
Appeared between Aldebaran and the Pleiades, and moved towards the West.	. . .	A. H.
From a few degrees below β Persei towards W. Horizon.	. . .	M. R.
From about 6° E. of 12 Canum Venaticorum towards horizon.	Center of track opposite 12 Canum Venaticorum.	T. W.
From a point a few degrees E. of ψ Ursæ Majoris, passed a few degrees from γ towards ζ Ursæ Majoris.	. . .	E. J.
From the direction of Polaris, passed close to β Cassiopeiæ towards horizon.	. . .	M. R.
From direction of Polaris, passed 3° above α Cygni towards ζ Cygni.	. . .	A. H.
From direction of γ Geminorum, passed across the belt of Orion towards S.W. horizon.	. . .	N.
From a point between λ and μ Ursæ Majoris to a point 3 degrees below β Ursæ Majoris.	. . .	A. H.
From a point near ψ Ursæ Majoris to *l* Ursæ Majoris.	. . .	F. T.
From a point a little below δ Geminorum across ζ Geminorum and a few degrees beyond.	. . .	M. R.

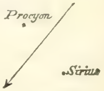
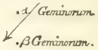
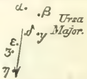
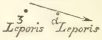
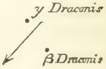
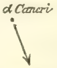
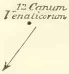
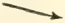
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	13. 55. 26	> 1st Mag. ✳	Blue	2 seconds	Fine train, 2^s.	15	
,,	13. 55. 40	= 1st Mag. ✳	White	2 seconds	No train	12	
,,	13. 56. 59	= 1st Mag. ✳	Blue	1 second	Faint train	20	
,,	13. 57. 30	= 2nd Mag. ✳	Blue	1 second	Train	10	
,,	13. 58. 2	= 1st Mag. ✳	Bluish	1 second	Fine train	20	Horizontal
,,	13. 58. 36	> 1st Mag. ✳	Blue	1 second	. . .	12	Inclined
,,	14. 0. 40	= 3rd Mag. ✳	Blue	Less than 1^s.	No train	12	Inclined
,,	14. 0. 42	= 3rd Mag. ✳	Blue	Less than 1^s.	No train	12	Inclined. Directed from χ Ursæ Majoris.
,,	14. 2. 25	= 2nd Mag. ✳	Blue	1 second	No train	6	Inclined slightly towards hor.
,,	14. 2. 45	= 2nd Mag. ✳	Bluish	1 second	No train	10	
,,	14. 3. 38	> 1st Mag. ✳	Bright blue	2 seconds	Wavy train	35	. . .
,,	14. 3. 45	= 2nd Mag. ✳	Blue	2 seconds	Small train	6	
,,	14. 4. 48	> 1st Mag. ✳	Blue	1½ second	Fine train, 1^s.	15	Inclined
,,	14. 4. 50	= 1st Mag. ✳	Bluish-white	2 seconds	Long train	20	Horizontal, E. to W.
,,	14. 5. 29	> 1st Mag. ✳	Brilliant blue	1 second	Fine train, bluish.	30	Almost perpendicular
,,	14. 8. 20	= 1st Mag. ✳	Blue	More than 1^s.	Train	25	Nearly horizontal
,,	14. 8. 40	= 2nd Mag. ✳	Bluish-white	1 second	No train	15	Inclined
,,	14. 8. 43	= 2nd Mag. ✳	Bluish-white	Less than 1^s.	No train	15	Inclined
,,	14. 8. 58	= 2nd Mag. ✳	Blue	2 seconds	Fine train	17	
,,	14. 9. 0	= 2nd Mag. ✳	Blue	2 seconds	Small train	35	

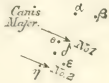
in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Passed a few degrees above α Geminorum towards γ Tauri.	. . .	N.
Towards S. horizon, disappeared about 5° above Sirius.	. . .	T. W.
From a point 10° below β Orionis towards S.S.W. horizon.	. . .	A. H.
From the direction of ξ Ursæ Majoris to η Ursæ Majoris.	. . .	N. F. T.
From δ Ursæ Majoris, disappeared just below γ Ursæ Majoris.	. . .	T. W.
Passed from direction of Polaris, to the West of γ Cephei, towards β Cassiopeiæ.	. . .	A. H.
From the direction of χ Ursæ Majoris, disappeared about 5° below η Ursæ Majoris, passing midway between that star and 12 Canum Venaticorum.	 α. β δ. γ χ ψ ε. ζ. η. 12 Canum Venaticorum. No 1 No 2.	N.
Appeared at the same altitude as 12 Canum Venaticorum, and pursued a path inclined to that of preceding meteor at an angle of 65°. (*See* sketch).	. . .	N.
Immediately below Sirius, moving westward.	. . .	F. T.
From a point just below τ Herculis, towards horizon.	. . .	T. W.
From direction of γ Cassiopeiæ to a point midway between η and β Pegasi.	This meteor was very similar to that at $13^{h}. 35^{m}. 30^{s}.$	A. H.
Passed between Capella and ε Aurigæ, towards β Aurigæ.	. . .	E. J.
From the direction of ν Geminorum, disappeared between β Cancri and Procyon.	. . .	N.
Passed between ζ and ε Orionis.		F. T.
From direction of Aldebaran, moved on a path parallel to α and ο Ceti.	. . .	A. H.
From a point 2° above λ Ursæ Majoris, passed between β and γ Ursæ Majoris.	. . .	A. H.
From χ Ursæ Majoris, passed above ε Ursæ Majoris.	. . .	A. H.
From *d* Canum Venaticorum passed above η Ursæ Majoris.	The path of this meteor was almost parallel to that of the preceding.	A. H.
From a point between ψ and β Ursæ Majoris, passed close to γ, towards ε Ursæ Majoris.	. . .	E. J.
From the direction of Coma Berenices, passed towards zenith close to β Ursæ Majoris, and disappeared a few degrees above α Ursæ Majoris.	. . .	E. J.

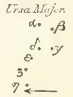
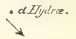
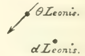
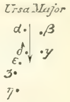
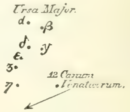
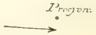
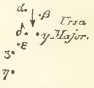
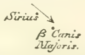
OBSERVATIONS of LUMINOUS METEORS

Month and Day. 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	14. 9. 26	= 1st Mag. *	Blue	3 seconds	Fine train	40	
,,	14. 9. 27	= Sirius	Blue	2 seconds	Fine train, 2ˢ·	20+	Inclined
,,	14. 9. 39	= Sirius	Bright blue	1 second	Fine train	35	Inclined
,,	14. 14. 59	= Jupiter	Blue	4 seconds	Fine train	18	Inclined
,,	14. 18. 35	= 1st Mag. *	Blue	1 second	No train	25	Almost perpendicular
,,	14. 19. 0	= 1st Mag. *	Blue	2 seconds	Fine train	8	
,,	14. 20. 24	= 1st Mag. *	Blue	2 seconds	Fine train	20	Almost horizontal
,,	14. 20. 59	= 1st Mag. *	Blue	2 seconds	Fine train	12	
,,	14. 23. 22	= 1st Mag. *	Bluish	1 second	No train	20	Inclined
,,	14. 23. 55	= 2nd Mag. *	Blue	1 second	Fine train	10	
,,	14. 24. 36	=2 × Sirius	Brilliant blue	More than 1ˢ·	Train	25	Inclined
,,	14. 25. 2	= Sirius	Blue	1 second	Fine train, 1ˢ·	6	Inclined at an angle of 45°
,,	14. 25. 50	= 2nd Mag. *	White	1 second	No train	10	Slightly inclined towards hor.
,,	14. 27. 0	= 1st Mag. *	Blue	2 seconds	Fine train	10	Curved
,,	14. 27. 22	= 1st Mag. *	Blue	1 second	Train	10	
,,	14. 28. 30	= 2nd Mag. *	Blue	1 second	Faint train	12	
,,	14. 28. 45	= 2nd Mag. *	White	1 second	Train	10	
,,	14. 28. 52½	= 2nd Mag. *	Bluish-white	½ second	No train	15	. . .
,,	14. 30. 0	= 1st Mag. *	Blue	2 seconds	Fine train	15	Inclined
,,	14. 30. 11	> Sirius	Blue	1 second	Train	8±	Inclined
,,	14. 30. 58	= 1st Mag. *	Blue	1 second	Fine train, 1ˢ·	..	From the direction of δ Orionis towards W.S.W. horizon.
,,	14. 31. 3	= Jupiter	Brilliant blue	2 seconds	No train	..	. . .
,,	14. 33. 2	= 1st Mag. *	Blue	2 seconds	Fine train, 2ˢ·	35	. . .
,,	14. 33. 8	= 1st Mag. *	Blue	More than 1ˢ·	Train	20	Inclined
,,	14. 34. 26	= 4th Mag. *	Blue	Less than 1ˢ·	Faint train	10	Inclined
,,	14. 34. 38	= 3rd Mag. *	Blue	Less than 1ˢ.	Faint train	10	Inclined. Directed from ξ Argûs.
,,	14. 34. 41	= Sirius	Blue	2 seconds	Fine train	12	

in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Passed midway between Procyon and Sirius; centre of track between those stars; line joining those stars at right angles to track of meteor.	. . .	T. W.
Passed from 5° below Procyon, disappeared near Sirius.	. . .	N.
From a point midway between Procyon and α Hydræ towards Sirius.	. . .	A. H.
From a point a little East and below β Ursæ Majoris towards North horizon, disappearing a few degrees East of η Ursæ Majoris.	. . .	E. J.
From direction of Polaris towards ζ Cygni.	. . .	A. H.
Passed between Castor and Pollux, from a point a few degrees above and to the West of the former, to a point a few degrees East of the latter star.	. . .	E. J.
From a point just below α Ursæ Majoris towards γ Ursæ Majoris.	. . .	T. W.
From a point in the vicinity of δ Ursæ Majoris, passed on the East side of ε Ursæ Majoris to a point a few degrees below and to the East of η Ursæ Majoris.	. . .	E. J.
From direction of Polaris towards η Cephei.	. . .	A. H.
From a point 2° above ζ Leporis, passed immediately above α Leporis towards the West.	. . .	N.
From δ Draconis towards ξ Draconis.	. . .	A. H.
Very low down, near Southern horizon, appeared at a point perpendicularly below κ Orionis, disappeared about altitude of 5°.	. . .	N.
From Castor towards γ Geminorum.	. . .	T. W.
Passed through Cassiopeia.	. . .	E. J.
Directed towards N. horizon from a point near γ Draconis.	. . .	A. H.
From near α Cancri towards horizon.	. . .	N.
Towards horizon from 2° below 12 Canum Venaticorum.	. . .	T. W.
From α Ursæ Majoris towards Polaris (15°).	. . .	A. H.
From a point a few degrees East of β Ursæ Majoris, passed almost midway between δ and ε Ursæ Majoris.	. . .	E. J.
Directed from Procyon to a point about 5° beyond Sirius.	. . .	A. H. T. W.
Appeared at a point about the same altitude as β Orionis, but 10° West of that star.	. . .	N.
Stationary. Due W. at altitude 20°.	. . .	A. H.
From a point slightly below Procyon, passed below γ Orionis.	. . .	N.
From Aldebaran, directed towards W. horizon.	. . .	A. H. T. W.
Passed above ο Canis Majoris. No. 1 in sketch.	 Canis Major. α β θ δ No. 1 ε η No. 2	N.
Passed about 1° above η Canis Majoris, and disappeared about 3° below δ Canis Majoris. No. 2 in sketch.		N.
Center of track opposite Sirius, passed about 3° below that star, directed towards S.S.W. horizon.	. . .	A. H.

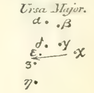
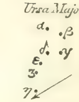
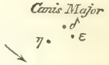
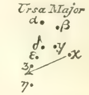
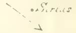
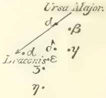
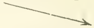
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	14. 36. 12	= 2nd Mag. *	Brilliant blue	1 second	Train	10	Inclined
,,	14. 36. 25	= 2nd Mag. *	Blue	1 second	Train	8	Inclined. Directed from α Leonis
,,	14. 37. 10	= 1st Mag. *	Blue	1 second	Train	10	Inclined. Directed from α Leonis
,,	14. 37. 15	= 1st Mag. *	Blue	3 seconds	Fine train	8	
,,	14. 38. 48	= 2nd Mag. *	Blue	1 second	No train	3	
,,	14. 40. 0	= 1st Mag. *	Blue	1 second	Train	6	
,,	14. 40. 20	= 3rd Mag. *	Blue	Less than 1 s.	. . .	12	
,,	14. 41. 21	= 2nd Mag. *	Blue	1 second	No train	18	 Ursa Major. α β δ γ ε ζ η 12 Canum Venaticorum.
,,	14. 41. 39	= 1st Mag. *	Bluish	2 seconds	Fine train	10	Perpendicular
,,	14. 42. 15	> Sirius	Blue	2 seconds	Brilliant train	35	Almost horizontal
,,	14. 45. 37	= 2nd Mag. *	Blue	More than 1 s.	No train	12	Almost perpendicular
,,	14. 46. 24	= 1st Mag. *	Blue	1 second	No train	6	Perpendicular
,,	14. 46. 53	= 1st Mag. *	Blue	1 second	Train, 3 s.	10	
,,	14. 47. 18	= 2nd Mag. *	Bluish	1 second	No train	8	
,,	14. 48. 23	= 2nd Mag. *	White	1 second	No train	10	Slightly inclined. Directed from Procyon.
,,	14. 49. 35	= 1st Mag. *	Bluish	1 second	No train	10	Perpendicular
,,	14. 51. 13	= 3rd Mag. *	White	½ second	No train	6	
,,	14. 51. 55	= 2nd Mag. *	White	1 second	No train	12	Inclined
,,	14. 52. 1	= 1st Mag. *	Blue	1 second	Fine train	15	Nearly horizontal
,,	14. 52. 22	= 1st Mag. *	Blue	1 second	. . .	12	. . .
,,	14. 54. 11	= 2nd Mag. *	White	½ second	No train	3	Horizontal, moving Westward
,,	14. 54. 41	= 2nd Mag. *	White	½ second	No train	3	Horizontal, moving Westward
,,	14. 55. 16	= 3rd Mag. *	Blue	1 second	Train	8	Perpendicular
,,	14. 56. 21	= 2nd Mag. *	White	1 second	No train	10	
,,	14. 57. 9	= 1st Mag. *	Blue	Less than 1 s.	No train	10	Directed from *l* Leonis Minoris.

in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
From β Orionis towards S.S.W. horizon.	. . .	A. H.
From a few degrees below α Leonis, passed slightly on the E. side of α Hydræ, and 1° or 2° beyond that star.	. . .	N.
Passed a few degrees W. of α Hydræ, and about 7° beyond, towards horizon.	. . .	N.
Disappeared about 3° below η Ursæ Majoris. (*See* sketch.)	. . .	E. J.
From a point just below α Hydræ towards S. horizon.	. .	T. W.
Across θ Leonis towards S.E. horizon. (Line connecting θ and α Leonis at right-angles to track of meteor.)	. . .	N.
From a point a few degrees above and E. of α Ursæ Majoris to a point as much below and E. of δ Ursæ Majoris.	. . .	N.
From a point about 4° E. of 12 Canum Venaticorum, passed below that star towards horizon. Point of disappearance about 20° vertically below ϵ Ursæ Majoris.	. . .	A. H.
From Sirius to ν Canis Majoris.	. . .	T. W.
From λ Ursæ Majoris, moved parallel to α and β Ursæ Majoris towards Polaris.	. . .	A. H.
From the direction of μ Ursæ Majoris, fell almost vertically towards horizon.	. . .	A. H.
From a point midway between 12 Canum Venaticorum and β Leonis towards E. horizon.	. . .	A. H.
Disappeared 1° or 2° below Procyon moving Westward.	. . .	A. H.
From a point 6° above and N. of the Moon, fell vertically within 5° of the Moon.	No loss of brightness from proximity to the Moon.	T. W.
Disappeared about 5° W. of Sirius.	. . .	T. W.
About midway between α and γ Orionis towards δ Orionis.	. . .	T. W.
From a point midway between α and β Ursæ Majoris, fell vertically to a point situated centrally between the four stars α, β, γ, and δ Ursæ Majoris.	. . .	A. H.
From δ Orionis towards horizon, past β Eridani.	. . .	T. W.
From the direction of ψ Ursæ Majoris, passed between β and γ Ursæ Majoris.	. . .	A. H.
Passed just above Polaris towards γ Cassiopeiæ.	. . .	A. H.
About 4° above S. horizon, directly below Orion.	Trees intervening	T. W.
In exactly the same position as meteor $14^h. 54^m. 11^s$.	Trees intervening	T. W.
From a point 2° left of Procyon vertically down.	. . .	A. H.
From a point 3° above and West of Sirius to a point similarly situated with reference to β Canis Majoris.	. . .	T. W.
Path parallel to a line joining δ and β Leonis, passed about 3° above those stars.	. . .	A. H.

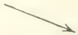
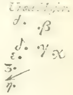
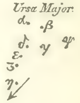
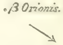
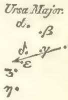
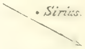
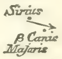
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	15. 0. 0	= 2nd Mag. *	Bluish	2 seconds	Fine train	4	Inclined slightly from hor.
,,	15. 0. 35	= 1st Mag. *	Bluish-white	1 second	Train, 1 s.	25	Perpendicular
,,	15. 2. 40	= 3rd Mag. *	Blue	1 second	No train	6	
,,	15. 4. 53	= 2nd Mag. *	Blue	Rapid motion	No train	10	. . .
,,	15. 5. 0	= 1st Mag. *	Blue	1 second	Train	25	
,,	15. 5. 30	= 1st Mag. *	Blue	Less than 1 s.	. .	5	
,,	15. 5. 45	= 1st Mag. *	Blue	2 seconds	Fine train, 3s.	30	Inclined 45° from horizontal
,,	15. 7. 18	= 1st Mag. *	Blue	1 second	Fine train	18	
,,	15. 8. 30	= 1st Mag. *	Blue	2 seconds	Long train	25	Nearly horizontal
,,	15. 10. 30	= 3rd Mag. *	Blue	Less than 1 s.	. .	2	E. to W., nearly horizontal
,,	15. 10. 56	= 2nd Mag. *	Bluish	1 second	No train	6	Inclined
,,	15. 11. 45	= 1st Mag. *	Blue	1 second	Fine train	10	
,,	15. 11. 53	= 2nd Mag. *	Blue	1½ second	No train	15	
,,	15. 12. 0	= 2nd Mag. *	Blue	. .	. .	12	Perpendicular
,,	15. 13. 18	= 3rd Mag. *	Blue	Less than 1 s.	Faint train	10	
,,	15. 14. 32	= 1st Mag. *	Blue	1 second	Fine train	16	Inclined at an angle of 45°
,,	15. 15. 5	= 1st Mag. *	Blue	2 seconds	Long train	30+	 Ursa Major. α β α Draconis δ γ ε ζ η
,,	15. 15. 26	= 1st Mag. *	Blue	2 seconds	Fine train	20	. . .
,,	15. 16. 18	= 1st Mag. *	Blue	1 second	Fine train	20	Inclined at an angle of 45°
,,	15. 17. 30	= 1st Mag. *	Blue	2 seconds	Bright train	18	
,,	15. 19. 45	= 1st Mag. *	Bluish-white	4 seconds	Fine train	10	Horizontal
,,	15. 20. 0	= 1st Mag. *	Blue	1 second	Fine train	6	Directed from δ Ursæ Majoris
,,	15. 20. 35	= 1st Mag. *	Blue	. .	. .	4	
,,	15. 21. 45	= Sirius	Blue	2 seconds	Bright train, 2 s.	20+	. . .
,,	15. 21. 58	= 1st Mag. *	White	2 seconds	Fine train	8	Inclined

in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Passed between β and γ Ursæ Minoris (2° below the former), from the direction of δ Ursæ Majoris.	. . .	E. J.
Vertically down, across α Arietis.	. . .	N.
Passed close to ε Ursæ Majoris from the direction of χ Ursæ Majoris.	. . .	F. T.
From direction of γ Ursæ Minoris, passed between θ and η Draconis.	. . .	A. H.
From the direction of *l* Leonis Minoris, passed close to η Ursæ Majoris to a point a few degrees beyond.	. . .	F. T.
In due S. near horizon; point of appearance 10° or 12° E. of η Canis Majoris.	. . .	N.
Passed across Aldebaran towards W. horizon.	. . .	N.
Across β Orionis.	. . .	N.
From a point near ψ Ursæ Majoris, passed just below γ and δ Ursæ Majoris towards α Draconis.	. . .	F. T.
Directed towards η Canis Majoris; point of appearance 10° E. of that star.	Very short path low down near S. horizon.	N.
About 3° above ξ Argûs, towards ε Canis Majoris.	Very near to the horizon.	T. W.
Appeared at altitude 20° in N.W., at a point midway between Aries and β Andromedæ, directed towards horizon.	. . .	N.
From a point near χ Ursæ Majoris, passed about 1° below ζ Ursæ Majoris.	. . .	F. T.
From a point 15° below Cassiopeia vertically down towards N. horizon.	. . .	N.
Passed a few degrees below Sirius ; center of track opposite that star.	. . .	N.
		T. W.
From the direction of β Orionis towards W. horizon.	. . .	N.
Passed from a point a few degrees above β Ursæ Majoris, across α Ursæ Majoris, to a point a few degrees N. of α Draconis.	. . .	F. T.
From a point just below ζ Orionis to between β and κ Orionis.	. . .	T. W.
Appeared about 6° above α Orionis, and passed across γ Orionis towards horizon.	. . .	N.
From δ Leonis, passed above α Leonis to ε Leonis.	. . .	N.
From a point near ψ Draconis, disappeared a few degrees below γ Ursæ Minoris.	. . .	F. T.
Passed between β and γ Ursæ Minoris (about 2° below the former).	. . .	E. J.
In Magnetic S.; altitude 10° at commencement. Point of appearance 15° E. of η Canis Majoris.	. . .	N.
From the direction of γ Geminorum, passed about 3° above α and γ Orionis towards S.W. horizon.	. . .	N.
A little above ξ Argûs towards δ Canis Majoris.	. . .	T. W.

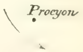
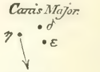
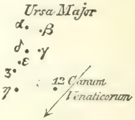
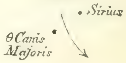
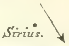
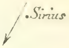
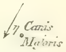
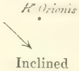
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	15. 23. 55	= 1st Mag. *	White	2 seconds	Fine train	20	
,,	15. 23. 59	= 1st Mag. *	Blue	1 second	Fine train	6	Inclined. Directed from a point a few degrees above δ Ursæ Majoris.
,,	15. 24. 0	= 2nd Mag. *	Blue	1 second	Train	4	
,,	15. 25. 31	= 1st Mag. *	Bluish	3 seconds	Fine train	10	
,,	15. 28. 25	= 2nd Mag. *	Bluish-white	1 second	Train	6	
,,	15. 29. 40	= 1st Mag. *	Blue	2 seconds	Fine train	20	. . .
,,	15. 30. 55	= 3rd Mag. *	Blue	1 second	No train	10	
,,	15. 32. 30	= 3rd Mag. *	Blue	Less than 1s.	Faint train	10	
,,	15. 33. 13	= 1st Mag. *	Blue	1 second	Fine train	25	Inclined
,,	15. 35. 53	= 2nd Mag. *	Blue	1 second	. .	12	. . .
,,	15. 37. 48	= Sirius	Blue	2 seconds	Fine train	10+	Inclined
,,	15. 42. 30	= 1st Mag. *	Blue	2 seconds	Fine train	20	Nearly horizontal. Directed from φ Ursæ Majoris.
,,	15. 42. 38	= Sirius	Blue	. .	Fine train	20	. . .
,,	15. 43. 33	= 1st Mag. *	Light green	3 seconds	Greenish train, 2s.	15	Inclined
,,	15. 44. 30	= 2nd Mag. *	Bluish	1 second	Fine train	18	
,,	15. 45. 50	= 3rd Mag. *	Blue	. .	No train	6	
,,	15. 45. 52	= 1st Mag. *	Blue	1 second	Train	15	
,,	15. 47. 0	= 1st Mag. *	Blue	2 seconds	Fine train	12	Horizontal
,,	15. 51. 27	= 1st Mag. *	White	2 seconds	Fine train	20	Inclined
,,	15. 57. 0	= 1st Mag. *	Blue	2 seconds	Fine train	8	
,,	15. 57. 10	= 1st Mag. *	Blue	1 second	Train	20	Inclined
,,	15. 57. 58	= 1st Mag. *	Blue	1 second	Faint train	30	Perpendicular
,,	16. 0. 1	= 2nd Mag. *	Blue	1 second	. .	10	Perpendicular

in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
A little below β Orionis.	. . .	T. W.
Passed midway between β and γ Ursæ Minoris.	. . .	E. J.
Passed between ζ and η Ursæ Majoris, directed from χ Ursæ Majoris.	. . .	F. T.
Passed about midway between β and κ Orionis.	. . .	T. W.
Passed one or two degrees below η Ursæ Majoris, directed from ψ Ursæ Majoris.	. . .	F. T.
From the direction of β Tauri, across the Pleiades, to a point 10° beyond.	. . .	N.
Passed within a few degrees of the Moon, from the direction of β Leonis.	. . .	F. T.
Directed from β Orionis towards West horizon; point of appearance 15° W. by S. of that star.	. . .	N.
From α Cancri to a point 15° East of Sirius; same altitude as that star.	. . .	N.
From λ Ursæ Majoris to a point just beyond β Ursæ Majoris.	. . .	A. H.
From a point above τ Canis Majoris to a point East and below ε Canis Majoris.	. . .	N.
Passed 2° above Polaris; center of track opposite that star.	. . .	E. J.
From a point 3° East and below α Orionis, passed Westward, 4° below γ Orionis.	. . .	N. F. T. T. W.
Passed between δ and ε Orionis, and disappeared about 5° West and below β Orionis.	. . .	T. W.
From a point near ψ Ursæ Majoris to a point a few degrees beyond ε Ursæ Majoris.	. . .	E. J.
From a point 10° below α Cancri.	. . .	N.
Towards West; passed one or two degrees below Sirius.	. . .	F. T.
Passed through Cassiopeia.	. . .	E. J.
From about 5° E. of 12 Canum Venaticorum towards γ Boötis.	. . .	T. W.
From a point a few degrees below Sirius, passed above β Canis Majoris.	. . .	E. J.
From α Leonis towards α Hydræ.	. . .	A. H.
From a point between β and α Cassiopeiæ (nearer the former), fell vertically towards horizon.	. . .	A. H.
From a point 5° W. of α Leonis.	. . .	A. H.

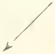
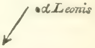
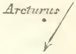
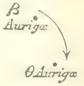
OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	16. 2. 15	= 1st Mag. *	Blue	2 seconds	No train	6	
,,	16. 2. 27	= Jupiter	Brilliant blue	2 seconds	. .	2	. . .
,,	16. 4. 0	= 1st Mag. *	Blue	1 second	No train	9	Inclined slightly from horizontal W. to E.
,,	16. 5. 10	= 3rd Mag. *	Blue	1 second	No train	12	Inclined
,,	16. 5. 28	= 3rd Mag. *	White	Rapid motion	No train	6	
,,	16. 6. 0	= 1st Mag. *	White	2 seconds	Fine train	20	Inclined
,,	16. 6. 15	= 1st Mag. *	Blue	1 second	Fine train	7	
,,	16. 6. 20	= 1st Mag. *	Bluish-white	2 seconds	Fine train, 2ˢ·	40	S. to N.
,,	16. 6. 50	= 1st Mag. *	Blue	2 seconds	Fine train, 4ˢ·	18	 Ursa Major α β δ γ ε ζ η 12 Canum Venaticorum
,,	16. 7. 36	> 1st Mag. *	Blue	1 second	Train	20	Inclined
,,	16. 8. 0	= 1st Mag. *	Blue	1 second	Fine train	8	
,,	16. 9. 43	= 1st Mag. *	White	2 seconds	No train	10	
,,	16. 10. 15	= 2nd Mag. *	Blue	1 second	Fine train	8	Perpendicular
,,	16. 10. 56	= 1st Mag. *	Blue	1 second	Train	10	
,,	16. 12. 11	= 1st Mag. *	Blue	1 second	Fine train	30	Inclined
,,	16. 12. 20	= 4th Mag. *	Blue	1 second	. .	18	. . .
,,	16. 13. 43	= 2nd Mag. *	Blue	2 seconds	Train	25	Inclined
,,	16. 14. 11	= 3rd Mag. *	Blue	Rapid motion	. .	6	
,,	16. 14. 37	= 2nd Mag. *	Blue	1 second	Train	15	Center of track nearly at τ Ursæ Majoris.
,,	16. 15. 0	= 1st Mag. *	Bluish-white	1 second	Train	8	Inclined
,,	16. 15. 12	= 1st Mag. *	White	3 seconds	. .	20	Inclined
,,	16. 15. 12	= 1st Mag. *	Bluish	2 seconds	. .	10	
,,	16. 16. 30	= 1st Mag. *	Bluish-white	1 second	Train	8	Inclined
,,	16. 17. 0	= 1st Mag. *	Blue	More than 1ˢ·	Fine train	40	. . .
,,	16. 17. 46	= 2nd Mag. *	Bluish-white	1 second	Train	20	Inclined
,,	16. 18. 17	= 1st Mag. *	Blue	More than 1ˢ·	Fine train	15	. . .
,,	16. 18. 27	= 1st Mag. *	Blue	1 second	White train, 2ˢ·	18	Inclined
,,	16. 19. 6	= 1st Mag. *	White	1 second	No train	10	Inclined
,,	16. 21. 40	= 1st Mag. *	Blue	1 second	Faint train	20	Inclined

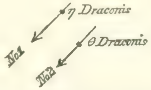
in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Passed a few degrees below Procyon.	. . .	E. J.
Very low down near Southern horizon.	No stars near	A. H.
Passed just below δ Canis Majoris to a point a few degrees above η Canis Majoris.	Center of track δ Canis Majoris	E. J.
From a point 2° W. of Sirius to δ Canis Majoris.	. . .	A. H.
From a point about 4° E. of α Hydræ.	. .	A. H.
From about 5° East of 12 Canum Venaticorum towards γ Boötis	. . .	T. W.
From the vicinity of η Canis Majoris towards horizon, path nearly parallel to line joining δ and ε Canis Majoris.	. . .	E. J.
Passed across the zenith, across θ Ursæ Majoris.	. . .	N.
Passed 5° East of 12 Canum Venaticorum; center of track opposite that star. Directed from ν Ursæ Majoris.	. . .	N.
From direction of Polaris, passed between γ and β Cephei.	. . .	A. H.
From a point midway between Sirius and ο Canis Majoris, curved towards horizon.	. . .	E. J.
From about 5° above Sirius, passed on West side of that star towards horizon.	Center of track opposite Sirius	T. W.
Fell vertically from a point a little West of γ Leonis to a point as much East of α Leonis.	. . .	E. J.
From a point 2° above Sirius towards horizon.	. . .	A. H.
From the direction of β Ursæ Minoris towards α Cassiopeiæ.	. .	A. H.
Passed across Polaris and γ Cephei to 5° beyond the latter star.		N.
Passed between Aldebaran and the Pleiades from the direction of β Tauri.	. .	A. H.
		E. J.
Point of disappearance a little East of η Canis Majoris.	. . .	A. H.
Passed near τ Ursæ Majoris in a due North direction.	. . .	N.
Passed a few degrees below the Pleiades.	Directed from Gemini	E. J.
From ε Orionis, passed 12° beyond β Eridani.	. . .	T. W.
About 12° below κ Orionis.	. . .	T. W.
Passed a few degrees above α and γ Orionis.	Same distance from each star	E. J.
From near θ Ursæ Majoris, passed to a point 4° North of 12 Canum Venaticorum.	. .	N.
From a point midway between Procyon and α Hydræ towards Sirius.	.	A. H.
Passed 15° in a due North direction from ζ Ursæ Majoris.	.	N.
From direction of α Leonis towards α Hydræ.	. .	A. H.
From about 3° above and North of ε Ursæ Majoris past ζ Ursæ Majoris.	. . .	T. W.
From a point a few degrees West of Procyon to a similar position with regard to Sirius.	. .	A. H.

OBSERVATIONS OF LUMINOUS METEORS

Month and Day. 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
November 12	16. 24. 30	= 1st Mag. *	Bluish	Momentary	Train	4	Inclined. Directed from δ Ursæ Majoris.
,,	16. 25. 40	= 1st Mag. *	Bluish	2 seconds	No train	8	Horizontal E. to W.
,,	16. 26. 2	= 1st Mag. *	Bluish	2 seconds	Fine train	20	
,,	16. 26. 13	= 2nd Mag. *	Blue	Rapid motion	No train	10	
,,	16. 26. 40	= 1st Mag. *	Bluish	2 seconds	Fine train	15	
,,	16. 37. 28	> 1st Mag. *	Blue	More than 1$^{s.}$	Faint train	30	
,,	16. 38. 30	= 1st Mag. *	Bluish	2 seconds	Fine train	18	Inclined. Directed from δ Ursæ Majoris.
,,	16. 45	= 1st Mag. *	Blue	1 second	Bright train	15	Inclined at an angle of 35° from hor.'
,,	16. 45	= 1st Mag. *	Blue	1 second	Bright train	15	Nearly the same inclination as preceding meteor.
,,	16. 46½	= 1st Mag. *	Blue	1 second	Faint train	15	Inclined
,,	16. 47½	= 1st Mag. *	Reddish	More than 1$^{s.}$	Train	25	Inclined
,,	16. 48	= Sirius	Blue	1 second	Fine train, 2$^{s.}$	20+	Inclined at an angle of 45°
November 13	9. 20. 0	= 5th Mag. *	White	0·4 second	No train	1	Perpendicular
,,	10. 29. 5	= 4th Mag. *	White	1 second	No train	30	Perpendicular
November 15	8. 38+	= 2nd Mag. *	Bluish-white	1 second	No train	10	
November 17	8. 30	= 1st Mag. *	Bluish-white	Less than 1$^{s.}$	No train	7	
November 18	6. 4. 30	= 3rd Mag. *	White	1 second	No train	5	Perpendicular
,,	6. 14. 30+	= 3rd Mag. *	White	3 seconds	Faint train	10	Inclined
,,	6. 59. 30+	= 2nd Mag. *	Bluish	2 seconds	Faint train	16	Slightly inclined from perp.
,,	9. 23. 0	= 2nd Mag. *	Blue	3 seconds	Faint train	20	Inclined
November 21	7. 11. 45	= 1st Mag. *	Blue	2 seconds	Faint train	10	Inclined
,,	10. 1. 0	= 2nd Mag. *	Bluish-white	1 second	No train	6	Nearly perpendicular
November 22	11. 11. 15	= 2nd Mag. *	Blue	1 second	No train	10	Inclined
November 24	6. 39. 0	= 3rd Mag. *	Bluish-white	½ second	No train	6	Inclined
,,	6. 45. 0	= 2nd Mag. *	Blue	1 second	Train	10	Inclined
,,	8. 20. 0	= 2 × Venus	Yellow	4 seconds	Train	30	Inclined
,,	8. 37. 0	= 3rd Mag. *	Blue	1 second	No train	7	Inclined
November 26	8. 30. 0	= 1st Mag. *	Yellow	1 second	Fine train	30	Inclined
December 2	9. 47. 30	= 1st Mag. *	Bright blue	1 second	No train	25	Inclined
December 11	6. 4. 57	= Aldebaran	Yellow	3 seconds	Fine train, 1$^{s.}$	36	Inclined
,,	6. 17. 36	= 2nd Mag. *	Bluish	2 seconds	No train	17	Almost horizontal
,,	6. 20. 42	= 1st Mag. *	Yellow	3 seconds	No train	15	Inclined
,,	6. 25. 49	= 2 × Jupiter	Bright yellow	5 seconds	No train	15	Almost perpendicular
,,	6. 28. 2	= 2 × Jupiter	Bright yellow	5 seconds	Yellow train, 3$^{s.}$	40	Inclined

in the YEAR 1865—*continued.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
Passed midway between β and γ Ursæ Minoris.	. . .	E. J.
A little below Sirius; center of track opposite that star.	. . .	E. J.
Directed towards East horizon; center of track between Arcturus and ε Virginis.	. . .	N.
From a point a little East of α Leonis towards horizon.	. . .	A. H.
Passed within a few degrees of Arcturus (S. side of that star) towards E. horizon.	Center of track opposite to Arcturus	E. J.
From direction of η Ursæ Majoris towards β Draconis.	. . .	A. H.
Passed midway between β and γ Ursæ Minoris; center of track between those stars.	. . .	E. J.
Passed across η Draconis towards North horizon. (No. 1 in sketch.)		N.
Passed across θ Draconis towards North horizon. (No. 2 in sketch.)	These two meteors appeared simultaneously, and pursued nearly parallel paths.	N.
From η Ursæ Majoris towards β Draconis.	. . .	A. H.
From the direction of Aldebaran across the Belt of Orion.	. . .	A. H.
Passed across Aldebaran towards W. horizon.	Center of track Aldebaran	N.
Close to β Orionis.	A flash only	T. W.
Fell past ε Orionis.	. . .	T. W.
From a point about 3° above β Aurigæ, disappeared a little to the S. of θ Aurigæ.	. . .	T. W.
Passed across α Aquarii from the direction of β Equulei.	. . .	N.
Fell vertically past R Draconis towards ψ Ursæ Majoris.	Center of track opposite R Draconis	T. W.
Passed midway between μ and R Lyræ towards θ Draconis.	. . .	T. W.
From γ Cygni to a point near β Cygni.	. . .	T. W.
From the direction of Capella towards α Orionis.	. . .	A. H.
Passed between β and ε Delphini, and disappeared a little below α Aquilæ.	Descended with a wavering motion	T. W.
Appeared near b Orionis, passed by ζ, and disappeared a little above L Orionis.	. . .	T. W.
From τ Cygni towards γ Cygni.	. . .	A. H.
From the direction of ι Herculis, disappeared near γ Draconis.	. . .	F. T.
Directed from ε Persei to a point a little below β Aurigæ.	. . .	F. T.
From the direction of u Lyncis, passed across χ Ursæ Majoris, and a few degrees beyond.	. . .	F. T.
From the direction of the Pleiades towards ζ Tauri.	. . .	A. H.
From a point midway between Capella and β Aurigæ to a point a little below the Pleiades.	. . .	F. T.
From direction of α Cassiopeiæ towards η Pegasi.	. . .	A. H.
From a point about 3° below and South of α Andomedæ, passed between β and τ Pegasi, and disappeared a few degrees above ε Pegasi.	Very wavy motion	T. W.
From a point about 1° below Polaris, disappeared about 2° above τ Draconis.	. . .	T. W.
From a point about 3° above α Draconis, disappeared about 2° above ε Ursæ Majoris.	Very slow motion	T. W.
From about 3° West of τ Aquarii, past δ Aquarii, and disappeared about 8° West of Fomalhaut.	A most splendid meteor	T. W.
From about 1° below β Cygni, passing West of α Aquilæ, and disappeared 10° below and East of λ Antinoi.	Very slow motion	T. W.

OBSERVATIONS of LUMINOUS METEORS

Month and Day. 1865.	Greenwich Mean Solar Time.	Apparent Size.	Colour.	Duration.	Appearance; Train, if any, and its Duration after the Meteor.	Length of Path.	Direction; noting also whether Horizontal, Perpendicular, or Inclined.
	h m s					°	
December 11	7. 0. 15	= 4th Mag. ✳	Bluish-white	0·3 second	No train	7	Nearly horizontal
,,	7. 4. 58	= 3rd Mag. ✳	Bluish	Momentary	No train	6	Inclined
December 14	8. 9. 6	= 2nd Mag. ✳	Blue	2 seconds	Faint train	20	
,,	8. 21. 53	= 3rd Mag. ✳	Blue	1 second	No train	7	Inclined at an angle of 45°
,,	8. 37. 40	= 4th Mag. ✳	Blue	Momentary	No train	5	Inclined at an angle of about 10° from horizontal.
,,	8. 44. 46	= 2nd Mag. ✳	Blue	2 seconds	No train	10	Inclined
,,	9. 6. 28	= 3rd Mag. ✳	Blue	Rapid motion	No train	4	Inclined
,,	9. 38. 15	= 3rd Mag. ✳	Bluish	Momentary	No train	4	. . .
,,	10. 15. 0	= 2nd Mag. ✳	Bluish-white	More than 1 s.	Faint train	12	Almost perpendicular
,,	10. 17. 0	= 4th Mag. ✳	Bluish	Momentary	No train	3	↙ • α Geminorum
,,	10. 19. 0	= 2 × 1st Mag. ✳	Blue	5 seconds	Train	35	Almost perpendicular
December 20	6. 56. 30	= 1st Mag. ✳	Bluish	2 seconds	No train	10	. . .

in the YEAR 1865—*concluded.*

Position, or Altitude and Azimuth.	Remarks.	Observer.
In E.—from a point a few degrees above the Pleiades to a point a few degrees below α Arietis.	Clouds rising in the East	N.
From about 3° above χ Cygni, disappeared about 3° below that star.	Cloudy through the remainder of the night	T. W.
From a point a little to the left of ρ Ursæ Majoris, passed about 2° left of *i* Ursæ Majoris, and disappeared about 4° above *i* Ursæ Majoris.	. . .	A. H.
From direction of E Lyncis, disappeared a little above D Lyncis.	Slow in motion	A. H.
		T. W.
Passed parallel to a line joining ι and θ Ursæ Majoris, and about 2° above those stars.	. . .	A. H.
From θ Orionis towards α Leporis.	Very slow motion	A. H.
Passed parallel to a line joining L and *p* Camelopardali.	. . .	A. H.
From the direction of β Cassiopeiæ, passed τ Cassiopeiæ.	. . .	T. W.
From a point 2° East of ε Geminorum, passed between ζ and δ Geminorum, and disappeared 3° below the latter star.	. . .	A. H.
		T. W.
From a point about 1° above Castor, passed that star towards N.E. horizon.	. . .	T. W.
From a point 1° or 2° West of *c* Lacertæ, moved parallel to a line joining τ and ε Cygni (West side of those stars), to about 10° beyond the latter star.	A very fine meteor. Slow motion	A. H.
From a point about 4° above β Pegasi, passed between that star and η Pegasi, and disappeared about 3° above λ Pegasi.	Foggy	T. W.

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RESULTS

OF THE

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS

MADE AT

THE ROYAL OBSERVATORY, GREENWICH.

1866.

(EXTRACTED FROM THE GREENWICH OBSERVATIONS, 1866.)

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS.

1866.

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GREENWICH MAGNETICAL AND METEOROLOGICAL OBSERVATIONS,
1866.

INTRODUCTION.

§ 1. *Buildings of the Magnetic Observatory.*

IN consequence of a representation by the Astronomer Royal, and a memorial by the Board of Visitors of the Royal Observatory, addressed to the Lords Commissioners of the Admiralty, an additional space of ground on the south-east side of the former boundary of the Observatory grounds was inclosed from Greenwich Park for the site of a Magnetic Observatory, in the summer of 1837, and the Magnetic Observatory was erected in the spring of 1838. Its nearest angle in its present form is about 174 feet from the nearest point of the S.E. dome, and about 30 feet from the office of Clerk of Works. It is based on concrete and built of wood, united for the most part by pegs of bamboo; no iron was admitted in its construction, or in subsequent alterations. Its form, as originally built, was that of a cross with four equal arms, very nearly in the direction of the cardinal magnetic points as they were in 1838; the length within the walls, from the extremity of one arm of the cross to the extremity of the opposite arm, was 40 feet, the breadth of each arm 12 feet. In the spring of 1862, the northern arm was extended 8 feet. The height of the walls inside is 10 feet, and the ceiling of the room is about 2 feet higher. The northern arm of the cross is separated from the central square by a partition, so as to form an ante-room. The meridional magnet, for observations of absolute declination and of variations of declination (placed in its position in 1838), is mounted in the southern arm; and the theodolite by which the magnet collimator is viewed, and by which circumpolar stars for determination of the astronomical meridian are also observed (for which observation an opening is made in the roof, with proper shutters,) is in the southern arm, near the southern boundary of the central square. The bifilar magnet, for variations of horizontal magnetic force (erected at the end of 1840) was mounted near the northern wall of the eastern arm; and the balance-magnetometer, for variations of vertical magnetic force (erected in 1841) was mounted near the northern wall of the western arm. Important changes have lately been made in the positions of these instruments, as will be mentioned below. The sidereal time-clock is in the south arm, near the south-east re-entering angle. The fire-grate (constructed of copper, as far as possible,) is near the north end of the west side of the ante-room. Some of these fixtures may contain trifling quantities of iron, and, as the ante-room is used as a computing room it is impossible to avoid the introduction of iron in small quantities; great care, however, is taken to avoid it as far as possible.

In 1864, a room, called the Magnetic Basement, was excavated below the whole of the Magnetic Observatory except the ante-room; the descent to it is by a staircase close to the south wall of the western arm of the building. For the theodolite, a brick pier was built from the ground below the floor of the basement, rising through the ceiling into the south arm of the upper room, and supporting the theodolite in exactly the same position as before.

Instead of a single meridional magnet performing the double functions of "magnet for determining absolute magnetic declination," and "magnet carrying a mirror for photographic register," there are now two meridional magnets, one in the upper room and one in the basement. The upper magnet is in a position about 10 inches north of the former position of the declination-magnet; it carries a collimator, for observation by the theodolite; but, in reversion of position of the collimator, the collimator is always either above or below the magnet, so that the magnet is always in the same vertical. The lower magnet, which is in the same vertical with the upper magnet, carries the mirror for the photographic register of the continual changes of declination. A massive brick pier is built in the south arm of the basement, covered by a stone slab; upon it is fixed the photographic lamp; from the stone slab rise three smaller piers, upon which crossed slates are placed; and from these rises a small pier through the ceiling, to the height of 18 inches above the upper floor, carrying the suspension of the lower magnet. Upon the tops of the three piers rest the feet of the original wooden stand carrying the suspension of the upper magnet.

The bifilar-magnetometer is in the basement, in a position vertically below its former position. A massive brick pier, surmounted by a thick slab of stone (upon which the photograph lamp is fixed) carries a pier consisting of a back and return-sides, which rises through the ceiling about 2 feet above the upper floor, and is crowned by a slate slab that carries the suspension of the bifilar-magnetometer.

The vertical-force magnetometer is in the basement, in a position vertically below its former position; it rests upon a brick pier, capped by a thick stone; to which also is fixed the plate of metal with narrow chink through which passes the light of the photographic lam

To the theodolite-pier are fixed telescopes for eye-observation of the bifilar and vertical-force magnetometers.

At the south-east re-entering angle (which has been rebated for the purpose) is the horizontal photographic cylinder, which receives the traces of the movements of the declination-magnet and the bifilar-magnet. The angle is so far cut away that the straight line joining their suspensions passes at the distance of one foot from the wall, and thus the cylinder receives the light from both instruments at right angles to its surface. The vertical cylinder which receives the traces of the movements of the vertical-force-magnet, and, of the self-registering barometer near it, is east of the vertical force pier.

In the south-west corner of the western arm, and partially beneath the staircase, is the apparatus for self-registration of the spontaneous galvanic currents on the wires leading respectively to Croydon and to Dartford.

The mean-time-clock is on the west wall of the south arm of the basement.

Adjoining the north wall of the east arm is the table for photographic operations. Much water is used in these operations, and therefore a pump is provided in the grounds at a distance of about 30 feet from the nearest magnetometer, by which the water is withdrawn from the cistern at the east end of the photographic table and at once discharged into a covered drain.

The basement is warmed by a gas-stove, and ventilated by a large copper tube nearly two feet in diameter, receiving the flues from the stove and all the lamps, and passing through the upper room to a revolving cowl above the roof. Each of the arms of the basement has a window facing the south, but in general the window wells are closely stopped.

The variations in the temperature of the instruments have been greatly reduced by their location within this basement.

On the outside of the Magnetic Observatory, near the north-east corner of the ante-room, a pole 79 feet in height is fixed, for the support of the conducting wires to the electrometers; the electrometers, &c., are planted in the window-seat at the north-end of the ante-room.

The apparatus for naphthalizing the gas used in the photographic registration was formerly fixed in a corner of the ante-room, but is now (1866) mounted in a small detached zinc-built room, erected in 1863, near the west side of the ante-room.

A small wooden building, in the direction S.S.E. (magnetic) from the Magnetic Observatory, 64 feet from its nearest angle, and very near the southern boundary of the grounds, was used till 1863 for the observation of Magnetic Dip; and another small building, in the direction S. (magnetic) from the Magnetic Observatory, 50 feet from the western angle of the southern arm, was used till 1862 for the observation of Deflexions. In 1863, these buildings were removed, and a range of seven rooms, usually called the Magnetic Offices, was erected near the southern fence of the grounds. Since the summer of 1863, observations of Dip and Deflexion have been made in the westernmost of these rooms.

At the distance of 28 feet south (magnetic) from the south-east angle of the southern arm is a square shed about 10^{ft} 6^{in} square, supported by four posts at the height 8 feet, with an adjustable opening at the center of the top. Under this shed are placed the large dry-bulb and wet-bulb thermometers, with a photographic cylinder, axis vertical, between them; and external to these are the gas flames, whose light passing through the thermometer-tubes above the quicksilver makes photographic traces upon the paper which covers the cylinder.

For better understanding of these descriptions, the reader is referred to the Descriptions of Buildings and Grounds with accompanying Maps, attached to the Volumes of Astronomical Observations for the years 1845 and 1862.

§ 2. *Upper Declination-Magnet and Apparatus for observing it.*

The theodolite with which the meridional magnet is observed is by Simms: the radius of its horizontal circle is 8·3 inches: it is divided to 5′, and reads to 5″, by three verniers, carried by the revolving frame of the theodolite. The fixed frame stands upon three foot-screws, which rest in brass channels let into a stone pier, that stands upon the brick pier rising from the ground of the Magnetic Basement. The revolving frame carries the Y's (with vertical adjustment at one end) for a telescope with transit-axis: the length of the axis is 10½ inches: the length of the telescope 21 inches: the aperture of the object glass 2 inches. The Y's are not carried immediately by the T head which crosses the vertical axis of the revolving frame, but by pieces supported by the ends of that T head, and projecting horizontally from it: the use of this construction is to allow the telescope to be pointed sufficiently high to see δ Ursæ Minoris above the pole. The eye-piece of the telescope carries only one fixed horizontal wire, and one vertical wire moved by a micrometer-screw. The opening in the roof of the building permits the observation of circumpolar stars, as high as δ Ursæ Minoris above the pole, and as low as β Cephei below the pole.

For supporting the magnet, a braced wooden tripod-stand is provided, whose mounting has been described above. Upon the cross-bars of the stand rests a double rectangular box (one box completely inclosed within another), both boxes being covered with gilt paper on their exterior and interior sides. On the southern side of the principal upright piece of the stand is a moveable upright bar, turning in the vertical E. and W. plane, upon a pin in its center (which is fixed in the principal upright), and carrying at its top the pulleys for suspension of the magnet; this construction is adopted as convenient for giving an E. and W. movement (now very rarely required) to the point of suspension, by giving a motion to the lower end of the bar. The top of the upright piece carries a brass frame with two pulleys, whose axes are E. and W.: one of these pulleys projects beyond the north side of the principal upright, and from it depends the suspension skein: the other pulley projects on the south side: the suspension skein being brought from the magnet up to the north pulley is carried over it and over the south pulley, to a small windlass, carried by the lower part of the moveable upright. The height of the two pulleys above the floor is about 11 ft. 3¾ in., and the height of the magnet is about 2 ft. 10 in.; the length of the metal carrier which bears the magnet is 1 ft. 3 in.; so that the length of the free suspending skein is about 7 ft. 2¾ in.

The magnet was made by Meyerstein, of Göttingen: it is a bar 2 feet long, 1½ inch broad, and about ¼ inch thick: it is of hard steel throughout. The magnet carrier was also made by Meyerstein, but it has since been altered by Simms. The magnet is inserted sideways and fixed by screws in a double square hook which constitutes the lower part of the magnet carrier. This lower part turns stiffly by a vertical axis with index in a graduated horizontal circle (usually called the torsion circle) attached to the upper part. The upper part of the magnet carrier is simply hooked into the skein.

The suspending skein was originally of silk fibre, in the state in which it is first prepared by silk manufacturers for further operations; namely, when seven or more fibres from the cocoon are united by juxtaposition only (without twist) to form a single thread. The skein was strong enough to support perhaps three times the weight of the magnet, &c.

In the summer and autumn of 1864, an attempt was made to suspend the Magnet by a steel wire, capable of supporting the weight 15 lbs.; but the torsion force was found to be so large as greatly to diminish the value of the observations; and the skein was finally restored on 1865, January 20. A similar attempt was made for suspension of the lower magnet; the skein, however, was restored on 1865, January 30.

Upon the magnet there slide two brass frames, firmly fixed in their places by means of pinching-screws. One of these contains, between two plane glasses, a cross of delicate cobwebs; the other holds a lens of 13 inches focal length and nearly 2 inches aperture. This combination, therefore, serves as a collimator without a tube: the cross of cobwebs is seen very well with the theodolite-telescope, when the suspension-bar of the magnet is so adjusted as to place the object-glass of the collimator in front of the object-glass of the theodolite, their axes coinciding. The wires are illuminated by a lamp and lens in the night, and by a reflector in the day.

In the original mounting of this magnet the small vibrations were annihilated by a copper oval or "damper," thus constructed: A copper bar, about one inch square, is bent into a long oval form, intended to contain within itself the magnet (the plane of the oval curve being vertical). A lateral bend is made in the upper half of the oval, to avoid interference with the suspension-piece of the magnet. The effect of this damper was that, after every complete or double vibration of the magnet, the amplitude of the oscillation is reduced in the proportion of 5 : 2 nearly.

On mounting the photographic magnetometer in the basement, the damper was removed from its place surrounding the upper magnet, and was adjusted to encircle the photographic magnet. The upper magnet remained unchecked in its vibrations till 1866, January 23, when the lower part of its magnet-carrier was connected with a brass bar which vibrates in water.

OBSERVATIONS RELATING TO THE PERMANENT ADJUSTMENTS OF THE UPPER DECLINATION-MAGNET AND ITS THEODOLITE.

1. Determination of the inequality of the pivots of the theodolite-telescope.

1862, December 26. The theodolite was clamped, so that the transit axis was at right angles to the astronomical meridian. The illuminated end of the axis of the telescope was first placed to the East: the level was applied, and its scale was read; the level was then reversed, and its scale was again read; it was then again reversed, and again read, and so on successively six times. The illuminated end of the telescope was then placed to the West, and the level was applied and read as before. This process was repeated four times, and the result was that when the level indicates the axis to be horizontal, the axis at the illuminated end is really too low by $0''\cdot 3$ nearly.

2. Value of one revolution of the micrometer-screw of the theodolite telescope.

On 1862, December 26, observations were made, giving for the value of one revolution of the micrometer 1′. 33″·85. On 1865, December 27, the magnet was made to rest on blocks of wood, and its collimator was used as a fixed mark at an infinite distance. The micrometer of the theodolite was placed in different positions, and the telescope of the theodolite was then turned till the micrometer wire bisected the cross. The result of ten comparisons of theodolite-readings with large values and with small values of the micrometer-reading was, that one revolution = 1′. 34″·8. This is used through the year 1866.

3. Determination of the micrometer-reading for the line of collimation of the theodolite-telescope.

1865, December 27. The vertical axis of the theodolite had been adjusted to verticality, and the transit axis was made horizontal. The declination-magnet was made to rest on blocks, and the cross-wires carried by it were used as a collimator for determining the line of collimation of the telescope of the theodolite. The telescope was reversed after each observation. The mean of 20 double observations was $100^{\mathrm{r}}\cdot120$. This value is used throughout the year 1866.

4. Determination of the effect of the mean-time-clock on the declination-magnet.

The observations by which this has been determined are detailed in the volumes for 1840, 1841, 1844, and 1845. It appeared that it was necessary to add 9″·41 to every reading of the theodolite. The clock was removed to the basement in 1864, having now nearly the same relative position to the lower declination-magnet which formerly it had to the upper. No correction is now applied to the upper declination-magnet.

5. Determination of the compound effects of the vertical-force-magnet and the horizontal-force-magnet on the declination-magnet.

The details applying to the effect of the horizontal-force-magnet and first vertical-force-magnet will be found in the volumes for 1840, 1841, 1844, and 1845. It appeared that it was necessary to subtract 55″·22 from all readings of the theodolite. In 1848 a new vertical-force-magnet was introduced, and the subtractive quantity was then found to be 42″·2. A few experiments in 1865 seemed to show that the correction is now 36″·9. No numerical correction has been applied.

6. Determination of the error of collimation for the plane glass in front of the boxes of the declination-magnet.

1865, December 27. The magnet was made to rest entirely on blocks. The micrometer head of the telescope was to the East. The plane glass has the word " top " engraved on it, and, in ordinary use, this word is always kept east. The cross-wire carried by the collimator of the magnet was observed with the engraved word alternately east and west. The result of 20 double observations was, that in the ordinary position of the glass 18″·5 is to be added to all readings.

7. Determination of the error of collimation of the magnet-collimator, with reference to the magnetic axis of the magnet.

1865, December 26. Observations were made by placing the declination-magnet in its stirrup, with its collimator alternately above and below, and observing the collimator-wire by the theodolite-telescope; the windlass of the suspending skein being so moved that the collimator in each observation was in the line of the theodolite-telescope. Sixteen pairs of observations were taken. The mean half excess of reading with collimator above, (its usual position) above that with collimator below was 26′. 7″·3. This value is used in the reductions for 1866.

8. Effect of the damper.

In the volume for 1841 observations are exhibited shewing that the oval copper bar, or damper, which then surrounded what is now the upper declination-magnet, had but little or no effect. Repeated observations, of less formal character, in succeeding years, have confirmed this result. The same bar has encircled the lower declination-magnet throughout the years 1865 and 1866. The following observations were made in the year 1865, for ascertaining the effect of the damper on the lower declination-magnet under various circumstances.

On 1865, February 8 and 10, and March 2, the time of vibration of the magnet was observed:—

Mean of times with damper in usual position	$23^{s}\cdot 888$
Mean of times with damper reversed end for end......................	$24^{s}\cdot 508$
Mean of times when damper was removed............................	$23^{s}\cdot 153$

These seem to indicate a repulsion of the magnet by the damper, but the magnet came to rest so rapidly that the observations are very uncertain.

On several days from 1865, April 2 to May 12, observations were made for ascertaining the deflexion of the magnet produced by turning the damper through a small angle round a vertical axis, passing through its center.

DAMPER IN USUAL POSITION.

			′ ″
Damper turned through 2°	N. end towards E.,	increase of western declination	−1. 27
	N. end towards W.,	,, ,, ,, ...	+1. 25
Damper turned through 4°	N. end towards E.,	,, ,, ,, ...	−2. 16
	N. end towards W.,	,, ,, ,, ...	+3. 11
Damper turned through 6°	N. end towards E.,	,, ,, ,, ...	−3. 10
	N. end towards W.,	,, ,, ,, ...	+2. 55
Damper turned through 8°	N. end towards E.,	,, ,, ,, ...	−1. 22
	N. end towards W.,	,, ,, ,, ...	+1. 45

DAMPER REVERSED END FOR END.

Damper turned through 2°	N. end towards E.,	increase of western declination	+0. 12
	N. end towards W.,	,, ,, ,, ...	+0. 20
Damper turned through 4°	N. end towards E.,	,, ,, ,, ...	0. 0
	N. end towards W.,	,, ,, ,, ...	+0. 26
Damper turned through 6°	N. end towards E.,	,, ,, ,, ...	+0. 5
	N. end towards W.,	,, ,, ,, ...	+0. 5
Damper turned through 8°	N. end towards E.,	,, ,, ,, ...	−0. 10
	N. end towards W.,	,, ,, ,, ...	+0. 5

The first series shews clearly that the damper in its usual position drags the magnet; the second shews no certain effect. It seems that the damper possesses two kinds of magnetism, one permanent, the other transiently induced, of nearly equal magnitude; their sum being about $\frac{1}{100}$ part of the terrestrial effect for the same deflexion.

From July 25 to August 9, observations were made to ascertain whether the effect of an external deflecting cause is the same with the damper present and the damper removed. The observation was extremely difficult, as the magnet was perpetually in vibration when the damper was removed. A small magnet on the east side of the N. end of the magnetometer, with its north end pointing towards the East (and therefore diminishing the western declination of the magnetometer), was moved to the distance (about five feet) at which it produced a deviation of 5′ nearly. The apparent western declination was observed, damper present, and damper removed. It appeared to be less with damper present than with damper removed, by 0′. 53″. The separate results are very discordant. If the conclusion has any validity, it tends to shew a repulsive power in the damper, opposite to that found in the preceding experiments. This experiment is regarded as inconclusive.

9. Calculation of the constant used in the reduction of the observations of the upper declination-magnet, the micrometer-head of the theodolite-telescope being East.

		°	′	″
Micrometer equivalent for reading for line of collimation, $100^{r}\cdot120$	−	2.	38.	11·4
Correction for the plane glass in front of the box, in its usual position	+			18·5
The collimator above the magnet. Correction for error of collimation	−		26.	7·3
Constant to be used in the reduction of the observations	−	3.	4.	0·2

10. Determination of the time of vibration of the upper declination-magnet under the action of terrestrial magnetism.

On 1866, September 13, it was found to be $30^{s}\cdot55$. On September 18, it was found to be $30^{s}\cdot65$.

11. Fraction expressing the proportion of the torsion-force to the earth's magnetic force.

By the same process which is described in the Magnetical Observations 1847, the proportion with the steel wire in use from 1864, June, to 1865, January 17, was found on 1865, January 17, to be $\frac{1}{8}$; and on January 18, with a new wire, $\frac{2}{21}$. With a silk skein, the proportion was found, on 1865, January 31, $\frac{1}{214}$; on February 17, $\frac{1}{227}$; on April 27, $\frac{1}{207}$; and on December 27, $\frac{1}{230}$.

DETERMINATION OF THE READINGS OF THE HORIZONTAL CIRCLE OF THE THEODOLITE CORRESPONDING TO THE ASTRONOMICAL MERIDIAN.

The error of the level is determined by application of the spirit-level at the time of observation: due regard being paid, in the reduction, to the inequality of pivots already found. One division of the level is considered = 1″·0526. The azimuth-reading is then corrected by this quantity;

Correction = Elevation of W. end of axis × tan star's altitude.

The readings of the azimuth circle increase as the instrument is turned from N. to E., S., and W.; from which it follows that the correction must have the same sign as the elevation of the W. end.

The correction for the azimuth of the star observed has been computed independently in every observation, by a peculiar method, of which the principle is fully explained in the volumes for 1840, 1841, 1843, 1844, 1845. The formula and table used are the following:—

Let $A_{''}$ = seconds of arc in star's azimuth,
C_s = seconds of time in star's hour-angle,
$a_{''}$ = seconds of arc in star's N.P.D. for the day of observation,

$$\text{Then log. } A_{''} = \text{log. } C_s + \text{log. } E + \text{log. } (a_{''} + F) + \text{log. cos } \varphi.$$

The values of log. *E*, *F*, and log. cos φ, are given in the following table:—

TABULATED VALUES of LOG. COS φ, for DIFFERENT VALUES of C_s, and of the QUANTITIES LOG. *E* and *F*, for the STARS POLARIS and δ URSÆ MINORIS.

Hour Angle.	Log. Cos φ for			
	Polaris.	δ Ursæ Minoris.	Polaris S.P.	δ Ursæ Min. S.P.
m				
1	9·99999	9·99999	9·99999	9·99999
2	999	999	999	999
3	999	999	999	999
4	998	998	998	998
5	996	996	997	997
6	994	994	996	996
7	992	992	994	995
8	990	989	992	993
9	988	986	990	991
10	985	983	988	989
11	981	979	985	987
12	978	975	982	984
13	974	971	979	981
14	970	966	975	978
15	966	961	972	975
16	961	955	968	971
17	956	950	964	968
18	951	944	959	964
19	945	937	955	960
20	939	930	950	956
21	932	923	945	951
22	926	915	939	946
23	919	908	933	941
24	912	900	928	936
25	904	891	922	930
26	896	882	915	925
27	888	873	909	919
28	880	863	902	912
29	871	853	894	906
30	9·99862	9·99843	9·99887	9·99900
Log. E	6·09721	6·13638	−6·03899	−6·00617
F	−186″·79	−944″·71	+181″·57	+886″·86

Observations for determining the readings for the astronomical meridian were made on the following days in 1866:—January 12, February 2, 10, 13, March 9, 17, April 4, 24, May 11, 17, 28, June 19, July 12, 19, August 4, 16, 31, September 15 and 21, October 22 and 31, November 6 and 30, December 7, 13, and 26. As a check on the continued steadiness of the theodolite, observations of a fixed mark (a small hole in a plate of metal above the Observatory Library, illuminated by a reflector of sky-light in the day and by a lamp at night,) have been taken about thirty times at nearly equal intervals through the year.

The following is a description of the method of making and reducing the eye-observations of the declination-magnet:—

A fine horizontal wire (as stated above) is fixed in the field of view of the theodolite-telescope, and another fine vertical wire is fixed to a wire-plate, moved right and left by a micrometer screw. On looking into the telescope, the cross of the magnetometer is seen; and during the vibration of the magnet, this cross is seen to pass alternately right and left. The observation is made by turning the micrometer till its wire bisects the image of the magnet-cross at the pre-arranged times, and reading the micrometer. The verniers of the horizontal circle are read.

The mean-time clock is kept very nearly to Greenwich mean time (its error being ascertained each day), and the clock-time for each determination is arranged beforehand. Chronometer M'Cabe 649 has usually been employed for observation.

If the magnet is in a state of disturbance, the first observation is made by the observer applying his eye to the telescope about one minute before the pre-arranged time; he bisects the magnet-cross by the micrometer wire at 45^s, and again at 15^s before that time, also at 15^s and 45^s after that time. The intervals of these four observations are therefore the same as the time of vibration of the magnet, and the mean of all the times is the same as the Greenwich pre-arranged mean time.

The mean of each pair of adjacent readings of the micrometer is taken (giving three means), and the mean of these three is adopted as the result. In practice, this is done by adding the first and fourth readings to the double of the second and third, and dividing the sum by 6.

Till 1866, January 23, the magnet was usually in a state of vibration; but since the introduction of the water damper on that day the number of instances of vibration has been very small. When it is found to be quite free from vibration, two bisections only of the cross are made, one about 15^s before the time recorded, the other about 15^s after that time, 30^s being nearly the time of a single vibration. (The lower magnet, furnished with the copper damper, never exhibits any troublesome vibrations.)

The adopted result is converted into arc, supposing $1^r = 1'.\ 34''\cdot 8$, and the quantity thus deduced is added to the mean of the vernier-readings, from which is subtracted the constant given in article 9 of the permanent adjustments; the difference between this number and the adopted reading for the Astronomical South Meridian is taken;

and thus is deduced the magnetic declination, which is used in determining the zero for the photographic register.

§ 3. *General principle of construction of Photographic self-registering Apparatus for continuous Record of Magnetic and other Indications.*

The general principle adopted for all the photographic instruments is the same. The photographic paper is wrapped round a glass or ebonite cylinder, (ebonite being adopted for the earth-current-apparatus) and the axis of the cylinder is made parallel to the direction of the movement which is to be registered.

The following is the arrangement of glass cylinders, for the Declination and Horizontal Force. One glass cylinder with a hemispherical extremity (in all respects similar to those used as shades or protectors of small clocks, works of art, &c.), about $11\frac{1}{2}$ inches long in its cylindrical part, and about $14\frac{1}{2}$ inches in circumference, is covered internally with a black pigment, and is stopped at the open end by insertion in a metallic cap, in the center of which is a short spindle and winch-arm. Round this cylinder the photographic paper is wrapped, and the moisture on the photographic paper agglutinates its overlapping ends with sufficient firmness. The cylinder and mounted paper are then covered by another glass cylinder with hemispherical end, whose open end is fixed, by friction, on the rim of the metallic cap to which the inner cylinder is attached, a collar of tape being inserted between. In this state the cylinders are placed in their working-mounting; the short spindle in the cap, and the large cylinder near its hemispherical end, rest upon anti-friction-rollers, the axis of the cylinder being horizontal. The winch-arm is lodged in a fork at the end of the hour-hand of a timepiece, which is made for the purpose, not exceeding in size an ordinary box-chronometer, but with very strong wheels and powerful spring, and with duplex escapement. The mounting of the ebonite cylinders is the same except that they and their external glass cylinders have no hemispherical ends, and that both ends of the ebonite cylinders turn by spindles, which rest on anti-friction wheels; and that the clock-communication is made by a toothed wheel instead of a winch-arm. In order to avoid the ordinary shake of the hour-hand of a clock, due to the play of the motion-wheels under the dial, the hour-hand is placed upon the central axis, and the second wheel, which is usually placed in the center and carries the minute hand, is placed on one side. The peculiarities of the Vertical Force and Thermometer cylinders will be mentioned below. The cylinders of the magnetic and earth-current registers turn in twenty-four hours: those of the thermometers, in forty-eight hours.

The light, by which the trace of each magnet is made, originates in a lamp (formerly of camphine, but, since 1849, of coal-gas charged with the vapour of coal-naphtha) placed slightly out of the direction of a straight line drawn from the concave-mirror of the magnet (to be mentioned shortly) to the center of the photographic sheet. Before the flame of the lamp is placed a small aperture, about $0^{\text{in}}\cdot3$ high and $0^{\text{in}}\cdot01$ broad, independent of the lamp, and supported by a part of the stone capping of the brick pier which carries the magnet. The light from the aperture falls upon the concave mirror of speculum-metal, which is carried by a part of the magnet-carrier, and which, although it has a small movement of adjustment relative to the magnet-carrier, is in practice very firmly clamped to it, so that the mirror receives all the angular movements of the magnet. By the concave mirror, the light diverging from the aperture is made to converge to a place nearly on the surface of the cylinder of photographic paper. The form of the aperture, however, and the astigmatism caused by the inclined reflexion from the mirror, produce this effect, that the image is somewhat elongated in the vertical direction, and is at the same time slightly curved. To diminish the length there is placed near the cylinder a plano-convex cylindrical lens of glass, with its axis horizontal, and the image is thus reduced to a neat spot of light. For the thermometers, the arrangement is different, as will be mentioned.

The spot of light (for the magnets, the earth currents, and the barometer) or the boundary of the line of light (for the thermometers) moves, with the movements which are to be registered, in the direction of the axis of the cylinder, while the cylinder itself is turned round. Consequently, when the paper is unwrapped from its cylindrical form, there is traced upon it (though not visible till the proper chemical agents have been applied) a curve, of which the abscissa measured in the direction of a line surrounding the cylinder is proportional to the time, while the ordinate measured in the direction parallel to the axis of the cylinder is proportional to the movement which is the subject of measure.

In the instruments for registering the motions of the magnets, the earth-currents, and the barometer, a line of abscissæ is actually traced on the paper, by a lamp giving a spot of light in an invariable position, the effect of which on the revolving paper is to trace a line surrounding the cylinder. For the thermometers this is not necessary, as the thermometer-scales are made to carry and to transfer to the photographic paper sufficient indications of the actual reading of the thermometers.

Every part of the cylinder-apparatus except those on which the spots of light fall is covered with a double case of blackened zinc, having a slit for each moveable spot of light and a hole for the invariable spot; and every part of the path of the photographic light is protected by blackened zinc tubes from the admixture of extraneous light.

In all the instruments, the following method is used for attaching, to the sheet of photographic paper, indications of the time when certain parts of the photographic trace were actually made, and for giving the means of laying down a time-scale applicable to every part of the trace. By means of a small moveable plate, arranged expressly for this purpose, the light which makes the trace can at any moment be completely cut off. An assistant, therefore, occasionally cuts off the light (registering in the proper book the clock-time of doing so), and after a few minutes withdraws the plate (again registering the time). The effect of this is to make a visible interruption in the trace, corresponding to registered times. By drawing lines from these points of interruption parallel to the axis of the cylinder, to meet the photographic line of abscissæ, or an adopted line of abscissæ parallel to it, points are defined upon the line of abscissæ corresponding to registered times. The whole length of the photographic sheet (except where one end, in the cylindrical arrangement, laps over the other) corresponds to the known time of revolution of the cylinder. A scale being prepared beforehand, whose value for the time of revolution corresponds to the circumference of the cylinder, and the scale-reading for the registered time of interruption of light being applied to the foot of the ordinate corresponding to that interruption, the divisions of hours and minutes may be transferred at once from the scale to the line of abscissæ. In practice it is found that the length of the paper is not always the same, and it is necessary, therefore, to use a scale (a separate one for each separate instrument) which will admit of small expansion and contraction, preserving the proportion of its different parts unaltered. Scales of vulcanized caoutchouc, mounted on a small frame in which one end of the scale is fixed while the other is drawn by a screw, were found to answer extremely well for a long time. About the end of 1866 it was found that they had expanded unequally in different parts, and in 1867 they have been superseded each by several pasteboard scales of different lengths, adapted to various lengths of the photographic sheets.

§ 4. *Lower Declination-Magnet; and Photographic self-registering Apparatus for Continuous Record of Magnetic Declination.*

The lower declination magnet is made by Simms. It is 2 feet long, 1½ inch broad, ¼ inch thick, of hard steel throughout, much harder than the upper declination magnet.

The magnet-frame consists of an upper piece, whose top is a hook, (to be hooked into the suspension-skein), and which carries a concave mirror 5 inches in diameter, used for the photographic record in the manner to be hereafter mentioned. The lower part of this upper piece turns in a graduated horizontal circle, similar to the torsion circle of the upper magnet, and attached to the lower piece or magnet-carrier proper. The lowest part of the carrier is a double square hook, in which the magnet is inserted and is kept in position by the pressure of three screws.

It has been mentioned in § 1 that a small pier built upon one of the crossed slates which are laid upon three piers rising from below, carries the suspension-pullies. The suspension-skein rises to one of these pullies, passes horizontally over a second pulley about 5 inches south of it, and then descends obliquely to a windlass which is fixed to the stone slab about 2 ft. 3 in. south of the center of the magnet.

The height of the pulley above the floor of the Basement is 10 ft. 4¾ in. As the height of the magnet above the floor is 2 ft. 10½ in., and the length of the magnet frame is 1ft. 3 in., there remains 6 ft. 3¼ in. of free suspending skein.

One of the revolving cylinders is used for the photographic record of the Declination Magnet and the Horizontal Force Magnet. In the preparation of the basement in 1864, as has been stated, the south-eastern re-entering angle was cut away, so that the straight line from the suspending skein of the declination-magnet to the center of the bifilar magnet passes through a clear space, in which the registering apparatus is placed.

The concave mirror of the declination-magnet is 5 inches in diameter, and is above the top of the magnet-box. The distance of the light-aperture from the mirror is about 25·3 inches. The spot of light from the mirror is received on the south side of the cylinder, near its west end.

For the declination-magnet, the values, in minutes and seconds of arc, of movements of the photographic spot in the direction of the ordinate, are thus deduced from a geometrical calculation founded on the measures of different parts of the apparatus. The distance of the cylinder from the concave mirror is about $11^{\text{ft.}}\ 0^{\text{in.}}\cdot 1$, and a movement of 1° of the mirror produces a movement of 2° in the reflected ray. From this it is found that 1° of movement of the mirror is represented by 4·611 inches upon the photographic paper. A small scale of pasteboard is prepared, whose graduations correspond in value to minutes and seconds so calculated. The zero of the ordinate-scale is found in the following manner. The time-scale having been laid down as is already described, and actual observations of the position of the magnet having been made with the eye and the telescope, (as has been fully described above), at certain registered times, there is no difficulty (by means of these registered times) in defining the points of the photographic trace which correspond to the observed positions. The pasteboard scale being applied as an ordinate to one of these points, and being slid up and down till the scale reading which represents the reading actually taken by the eye-observation falls on that point, the reading of the scale where it crosses the line of abscissæ is immediately found. The various readings given by different observations, so long as there is no instrumental change, will scarcely differ, and may be combined in groups, and thus an adopted reading for the line of abscissæ may be obtained. From this, with the assistance of the same pasteboard scale, there will be laid down without difficulty a new line, parallel to that line of abscissæ, whose ordinate would represent some whole number of degrees, or other convenient quantity.

§ 5. *Horizontal-Force-Magnet and Apparatus for observing it.*

The horizontal-force-magnet, furnished by Meyerstein of Göttingen, is, like the declination-magnet, 2 feet long, 1½ inch broad, and about ¼ inch thick. For its support (as is mentioned above), a brick pier in the eastern arm of the Magnetic Observatory, built on the ground below the basement floor, rises through the floor of the upper room, and carries a slate slab, to the top of which a brass frame is attached, carrying two brass pulleys (with their axes in the same east and west line) in front of the pier, and two (in a similar position) at the back of the pier; these constitute the upper suspension-piece. A small windlass is attached to the back of the pier at a convenient height. The magnet-carrier consists of two parts. The upper part is a horizontal bar, 2½ inches long, whose ends are furnished with verniers for reading the graduations of the torsion-circle (a portion of the lower part, to be mentioned below) on the upper side of this horizontal bar are two small pullies with axes horizontal and at right angles to the vertical plane passing through the length of the bar: by these pullies the apparatus is suspended, as will be mentioned. From the lower side of the horizontal bar, a vertical axis projects downwards through the center of the torsion-circle, in which it turns by stiff friction. The lower part of the magnet-carrier consists, first of the torsion-circle, a graduated circle about 3 inches in diameter: next, immediately below the central part of the torsion-circle, is attached (but not firmly fixed) a circular piece of metal from which projects downwards a frame that, by means of three cramps and screws, carries the photographic concave mirror, with the plane of its front under the center of the vertical axis: this circular piece of metal has a radial arm upon which acts a screw carried by the torsion-circle, for giving to the concave mirror small changes of azimuthal position. Thirdly, there is fixed to the torsion-circle, at the back of the mirror frame but not touching it, a bar projecting downwards, bent horizontally under the mirror frame and then again bent downwards, carrying the cramps in which the magnet rests, and, still lower, a small plane mirror, to which a fixed telescope is directed for observing by reflexion the graduations of a fixed scale (to be mentioned shortly). Under the two small pulleys mentioned above passes a skein of silk; its two branches rise up and pass over the front pulleys of the suspension-piece, then over its back pulleys, and then descend and pass under a single large pulley, whose axis is attached to a wire that passes down to the windlass. Supported by the two branches of the skein, the magnet swings freely, but the direction that it takes will depend on the angular position of its stirrup with respect to the upper horizontal bar; it is intended that the index should be brought to such a position on the torsion-circle that the two suspending branches should not hang in one plane, but should be so twisted that their torsion-force will maintain the magnet in a direction very nearly E. and W. magnetic (its marked end being W.); in which state an increase of the earth's magnetic force draws the marked end towards the N., till the torsion-force is sufficiently increased to resist it; or a diminution allows the torsion-force to draw it towards the S. The magnet, with its plane mirror, hangs within a double rectangular box (one box completely inclosed within another) covered with gilt paper, similar to that used for the declination-magnet; in its S. side there is one long hole, covered with glass, through which the rays of light from the scale enter to fall on the plane mirror, and the rays reflected by the mirror pass to the fixed telescope. The vertical rod (below the torsion-circle), which carries the magnet-stirrup, passes through a hole in the top of the box. Above the magnet box is the concave mirror above mentioned. The height of the brass pulleys of the suspension-piece above the floor is $11^{\text{ft.}}\ 8^{\text{in.}}\ 5$; that of the pulleys of the magnet-carrier is $4^{\text{ft.}}\ 2^{\text{in.}}\ 5$; and that of the center of the plane mirror is about $3^{\text{ft.}}\ 1^{\text{in.}}$. The distance between the branches of the silk skein, where they pass over the upper pulleys, is $1^{\text{in.}}\cdot 14$; at the lower part the distance between them is $0^{\text{in.}}\cdot 80$.

An oval copper bar (exactly similar to that for the declination-magnet), embraces the magnet for the purpose of diminishing its vibrations.

The scale, which is observed by means of the plane mirror, is in a horizontal position, and is fixed to the South wall of the East arm of the magnetic basement. The numbers of the scale increase from East to West, so that when the magnet is inserted in the magnet-cell with its marked end towards the West, increasing readings of the scale (as seen with a fixed telescope directed to the mirror which the magnet carries) denote an increasing horizontal force. A normal from the plane-mirror to the scale meets it at the division 51 nearly; the distance from the center of the plane-mirror to the scale is $7^{\text{ft.}}\ 6^{\text{in.}}\cdot 8$.

The telescope is fixed on the east side of the brick pier which supports the stone pier of the declination-theodolite in the upper observing room. The angle between the normal to the scale (which usually coincides nearly with the normal to the axis of the magnet) and the axis of the telescope, is about 38°, and the plane of the mirror is therefore inclined to the axis of the magnet about 19°.

OBSERVATIONS RELATING TO THE PERMANENT ADJUSTMENTS OF THE HORIZONTAL-FORCE-MAGNET.

1. Determination of the times of vibration and of the different readings of the scale for different readings of the torsion-circle, and of the reading of the torsion-circle and the time of vibration when the magnet is transverse to the magnetic meridian.

To render the process intelligible, it may be convenient to premise the following explanation.

Suppose that the magnet is suspended in its stirrup which is firmly connected with the small plane mirror, with its marked end in a magnetic westerly direction (not exactly W., but in any westerly direction between N. and S.), and suppose that, by means of the telescope directed towards that mirror, the scale is read, or (which is the same thing) the position of the plane mirror and of the stirrup, and therefore that of the axis of the magnet, are defined. Now let the magnet be taken out of the stirrup and replaced with its marked end easterly. The terrestrial magnetic power will now act, as regards torsion, in the direction opposite to that in which it acted before, and therefore the magnet will not take the same position as before. But by turning the torsion-circle, which changes the amount and direction of the torsion-power produced by the oblique tension of the suspending cords, the magnet may be made to take the same position as before (which will be proved by the reading of the scale, as viewed in the plane mirror, being the same as before). The reading of the torsion-circle will be different from what it was before. The effect of this operation then is, to give us the difference of torsion-circle-readings for the same position of the magnet-axis with the marked end opposite ways, but it gives no information as to whether the magnet-axis is transverse to the meridian, inasmuch as the same operation can be performed whether the magnet-axis is transverse or not.

But there is another observation which will inform us whether the magnet-axis is or is not transverse. Let the time of vibration be taken in each position of the magnet. Resolve the terrestrial magnetic force acting on the poles of the magnet into two parts, one transverse to the magnet, the other longitudinal. In the two positions of the magnet (marked end westerly and marked end easterly, with axis in the same position), the magnitude of the transversal force is the same, and the changes which the torsion undergoes in a vibration of given extent are the same, and the time of vibration (if there were no other force) would be the same. But there is another force, namely the longitudinal force; and when the marked end is northerly, this tends from the center of the magnet's length, and when it is southerly it tends towards the center of the magnet's length; and in a vibration of given extent this produces force, in one case increasing that from the torsion and in the other case diminishing it. The times of vibration therefore will be different. There is only one exception to this, which is when the magnet-axis is transverse to the magnetic meridian, in which case the longitudinal force vanishes.

The criterion then of the position truly transverse to the meridian (which position is necessary in order that the indications of our instrument may apply truly to changes of the magnitude of terrestrial magnetic force without regard to changes of direction) is this. Find the readings of the torsion-circle which, with magnet in reversed positions, will give the same readings of the scale as viewed by reflexion in the plane mirror, and will also give the same time of vibration for the magnet. With these readings of the torsion-circle the magnet is transverse to the meridian; and the difference of the readings of the torsion-circle is the difference, between the position when terrestrial magnetism acting on the magnet twists it one way, and the position when the same force twists it the opposite way, and is therefore double the angle due to the torsion-force of the suspending lines when they neutralize the force of terrestrial magnetism.

The following table exhibits the elements of one of the determinations made in 1866:—

1865.	The Marked end of the Magnet.							
	West.				East.			
Day.	Torsion-Circle Reading.	Scale Reading.	Difference of Scale Readings for 1° of Torsion.	Mean of the Times of Vibration.	Torsion-Circle Reading.	Scale Reading.	Difference of Scale Readings for 1° of Torsion.	Mean of the Times of Vibration.
	°	div.	div.	s	°	div.	div.	s
Dec. 29	140	13·68	8·05	21·46	222	11·62	7·95	19·62
	141	21·73	9·40	21·42	223	19·57	7·38	20·16
	142	31·13	8·85	21·32	224	26·95	7·96	20·32
	143	39·98	7·60	21·10	225	34·91	8·32	20·54
	144	47·58	8·62	21·02	226	43·23	7·04	20·54
	145	56·20	7·63	20·72	227	50·27	8·49	20·70
	146	63·83	7·64	20·66	228	58·76	8·45	20·78
	147	71·47	8·11	20·56	229	67·21	8·44	21·04
	148	79·58	7·46	20·38	230	75·65	9·48	21·26
	149	87·04	9·38	20·22	231	85·13	8·76	21·34
	150	96·42		20·16	232	93·89		21·50

The times of vibration and scale readings were sensibly the same, when the torsion-circle read 145°., marked end West, and 227°. 41′, marked end East, differing 82°. 41′. Half this difference, or 41°. 20′, is the angle of torsion when the magnet is transverse to the meridian.

The mean of several determinations gave 41°. 14′., and this value was adopted for the year 1866. The reading adopted for the torsion-circle, marked end of the magnet West, was 145° for the year.

2. Computation of the angle corresponding to one division of the scale, and of the variation of the horizontal force (in terms of the whole horizontal force) which moves the magnet through a space corresponding to one division of the scale.

It was found by accurate measurements, on 1864, November 3, that the distance from $51^{\text{div.}}$ on the scale to the center of the face of the plane mirror is $7^{\text{ft.}}\ 6^{\text{in.}}\,84$, and that the length of $30^{\text{div.}}\!\cdot\!85$ of the scale is exactly 12 inches; consequently the angle at the mirror subtended by one division of the scale is 14′. 43″·25, or, for one division of the scale, the magnet is turned through an arc of 7′. 21″·625.

The adopted angle of torsion as mentioned above is 41°. 14′; consequently the variation of horizontal force (in terms of the whole horizontal force) for a disturbance through one division of the scale, computed by the formula, "Cotan. angle of torsion × value of one division in terms of radius," is 0·0024428. This number has been used for the year 1866.

3. Determination of the compound effect of the vertical-force-magnet and the declination-magnet on the horizontal-force-magnet, when suspended with its marked end towards the West.

The details of the experiments, made while the old vertical-force-magnet was in use, will be found in the volumes for 1841, 1842, 1843, 1844, 1845. The effect was to increase the readings by $0^{\text{div.}}\!\cdot\!487$. On mounting a new vertical-force-magnet in 1848, similar experiments were made, and the resulting number was $0^{\text{div.}}\!\cdot\!45$. These quantities are totally unimportant in their influence on the registers of changes of horizontal force. No experiments have been made since the magnets were placed in the basement.

4. Effect of the damper.

In the year 1865, from May 17 to May 25, observations were made for ascertaining the deflection of the magnet produced by turning the damper through a small angle round a vertical axis passing through its center.

DAMPER IN USUAL POSITION.

		div.
Damper turned through 2°	W. end towards S., increase of scale-reading	−0·251
	W. end towards N., ,, ,, ...	+0·050
Damper turned through 4°	W. end towards S., ,, ,, ...	−0·34
	W. end towards N., ,, ,, ...	+0·16

DAMPER REVERSED END FOR END.

Damper turned through 2°	W. end towards S., increase of scale-reading	−0·15
	W. end towards N., ,, ,, ...	−0·02
Damper turned through 4°	W. end towards S., ,, ,, ...	−0·12
	W. end towards N., ,, ,, ...	+0·08

On 1865, July 25, observations were made to ascertain whether the effect of an external deflecting cause is the same with the damper present and the damper removed.

A small magnet was placed with its marked end pointing N. at the distance 4 feet S. of the unmarked end of the horizontal-force-magnet, deflecting the magnet through $1^{\text{div.}}$ of the scale, and the scale-readings were observed with the damper in its usual place and the damper away. Three experiments were made, containing twenty-four observations of position. Not the smallest difference of position of the horizontal-force-magnet was produced by the presence or absence of the damper. The observations were very easy, and the result is certain.

No experiments on the dampers have been made since 1865.

5. Determination of the correction for the effect of temperature on the horizontal force magnet.

In the Introduction to the volume of Magnetical and Meteorological Observations for 1847 will be found a detailed account of observations made in the years 1846 and 1847 for determination of this element. The principle adopted was that of observing the deflection which the magnet (to be tried) produces on another magnet; the magnet (to be tried) being carried by the same frame which carries the telescope that is directed to the plane mirror attached to the other magnet, and which also carries the scale that is viewed in these experiments by reflection in that plane mirror. The rotation of the frame was measured by a graduated circle about 23 inches in diameter. The magnet (to be tried) was always on the eastern side of the other magnet. It was enclosed in a copper trough, which was filled with water at different temperatures. One end of the magnet (to be tried) was directed towards the other magnet. The values found for correction of the results as to horizontal force determined with the magnet at temperature t° in order to reduce them to what they would have been if the temperature of the magnet had been 32°, expressed as multiples of the whole horizontal force, were,*

When the marked end of the magnet (to be tried) was West,

$$0{\cdot}00007137\,(t-32) + 0{\cdot}000000898\,(t-32)^2.$$

When the marked end of the magnet (to be tried) was East,

$$0{\cdot}00009050\,(t-32) + 0{\cdot}000000626\,(t-32)^2.$$

The mean, or

$$0{\cdot}00008093\,(t-32) + 0{\cdot}000000762\,(t-32)^2$$

has been embodied in tables which have been used in the computation of the "Reduction of Magnetic Observations 1848–1857," attached to the Volume of Observations 1859, and in the computation for "Days of Great Magnetic Disturbance 1841–1857," attached to the volume for 1862. The same formula is employed in the Reduction of Magnetic Observations 1858–1863, now in progress.

In the year 1864 observations were made for ascertaining the temperature-coefficient by heating the magnet by hot air. The deflecting magnet was placed in a copper box planted upon the top of a copper gas-stove, whose heat could be regulated by manipulation of a tap, and from which rose a stream of heated air (not the air vitiated by combustion) through a large opening in the bottom of the box. With this apparatus, the force that acted upon a deflected magnet was measured by the tangent of the angle of deflection. The apparent effect of the temperature was so great (five or six times that found by use of water) that I imagine that some untraced cause of error existed in the operation, and I therefore abstain from publishing it.

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* By inadvertence in printing the Introduction 1847. the letter t has been used in two different senses.

From 1867, December 30, to 1868, February 21, experiments were made for determining the temperature-coefficient under the actual circumstances of observation, by heating the Magnetic Basement to different temperatures, and observing the changes of scale reading as viewed in the telescope, and also, the changes of indications on the photographic registers. The general result is, that the correction required for the horizontal-force-magnet is small, but that required for the vertical-force-magnet is large and negative in sign. A more detailed account will be given in a subsequent volume.

The method of observing with the horizontal-force-magnet is the following:—

A fine vertical wire is fixed in the field of view of the telescope, which is directed to the plane mirror carried by the magnet. On looking into the telescope, the graduations of the fixed scale, mentioned in page *xvii*, are seen; and during the oscillations of the magnet, the divisions of the scale are seen to pass alternately right and left across the wire. The clock-time, for which the position of the magnet is to be determined, is the same as that for the observation of declination. The first observation is made by the observer applying his eye to the telescope 40^s before that time, and, if the magnet is in a state of vibration, he observes the next four extreme points of vibration of the scale, and the mean of these is adopted in the same manner as for the declination-observations; but if it is at rest, then at 10^s before the pre-arranged time, he notes the division of the scale bisected by the wire; and 10^s after the pre-arranged time he notes whether the same division continues bisected, and if it does, that reading is adopted as the result.

The number of instances when the magnet was observed in a state of vibration during the year 1866 is very small.

Outside the double box is suspended a thermometer, which is read at every hour of observation. On two days also of every week, till August 31, and on every day except Sunday after September 1, the readings of the thermometer were taken at 21^h, 22^h, 23^h, 0^h, 1^h, 2^h, 3^h, and 9^h. Self-registering maximum and minimum thermometers placed outside the box were read twice every day, but in consequence of the very small diurnal range of temperature, their readings are not printed in the volume.

§ 6. *Photographic self-registering Apparatus for Continuous Record of Magnetic Horizontal Force.*

Much of the description of the photographic apparatus attached to the declination-magnet applies also to that which is attached to the horizontal-force-magnet. A concave mirror of speculum-metal, 4 inches in diameter, is carried by the magnet-carrier. The light of a lamp of naphthalized gas shines through a small aperture $0^{\text{in.}}\cdot3$ high, and $0^{\text{in.}}\cdot01$ broad (which is supported by the solid base of the brick pier carrying the magnet-support), at the distance of about 21·25 inches from the concave mirror, and is made to converge to a point, on the north surface and near the east end of the same revolving cylinder which receives the light from the concave mirror of the declination-magnet. A cylindrical lens parallel to the axis of the cylinder receives the somewhat elongated image of the source of light, and converts it into a well-defined spot. The motions of this spot parallel to the axis represent the angular movements of the magnet which are produced by an increase of terrestrial magnetic force overcoming more completely the torsion-force of the bifilar suspension, or by a diminution of terrestrial force yielding to the torsion-force.

As the spot of light from the horizontal-force-mirror falls on the side of the cylinder opposite to that on which the light from the declination-mirror falls, the same time-scale will not apply to both; it is necessary to prepare a time-scale independently for each.

The following is the calculation by which the scale of horizontal force on the photographic sheet is determined. The distance between the surface of the concave mirror and the surface of the cylinder is 134·436 inches; consequently, one degree of angular motion of the magnet, producing two degrees of angular motion of the reflected ray, moves the spot of light through 4·6927 inches. Now the variation of horizontal force (in terms of the whole horizontal force) corresponding to one degree of angular motion of the magnet $= \sin 1^\circ \times \text{cotan } 41^\circ.\ 14'. = 0{\cdot}019914$ nearly. From these numbers it is immediately found that a movement of the spot of light through 2·3565 inches corresponds to a variation of horizontal force expressed by 0·01 part of the whole horizontal force. With this fundamental number, the graduations of the pasteboard scale for measure of horizontal force have been prepared.

§ 7. *Vertical-Force-Magnet, and Apparatus for observing it.*

The vertical-force-magnet in use to 1848 was made by Robinson; that in use from 1848 to 1864, January 20, was by Barrow. The magnet now in use is by Simms. Its length is $1^{\text{ft.}}\ 6^{\text{in.}}$; it is pointed at the ends. After some trials, it was re-magnetized by Mr. Simms on 1864, June 15. Between 1864, August 27, and September 27, a new knife-edge was attached to it, to remedy a defect which, as was afterwards found, arose from a cause that had no relation to the knife-edge. Its supporting frame rests upon a solid pier, built of brick and capped with a thick block of Portland stone, in the western arm of the magnetic basement. Its position is as nearly as possible symmetrical with that of the horizontal-force-magnet in the eastern arm. Upon the stone block is fixed the supporting frame, consisting of two pillars (connected at their bases) on whose tops are the agate planes upon which vibrate the extreme parts of the knife-edge (to be mentioned immediately). The carrier of the magnet is an iron frame, to which is attached, by clamps and pinching screws, a steel knife-edge, about 8 inches long. The steel knife-edge passes through an aperture in the magnet. The axis of the magnet is as nearly as possible transverse to the meridian, its marked end being E. The axis of vibration is as nearly as possible N. and S. To the southern end of the iron frame, and projecting further south than the end of the knife-edge, is fixed a small plane mirror, whose plane makes with the axis of the magnet an angle of $52\frac{3}{4}^{\circ}$ nearly. The fixed telescope (to be mentioned) is directed to this mirror, and by reflexion at the surface of the mirror it views a vertical scale (to be mentioned shortly). The height of this mirror above the floor is about $2^{\text{ft.}}\ 10^{\text{in.}}\cdot 6$. Before the introduction of the photographic methods, the magnet was placed in a perforation of a brass frame midway between its knife-edges. But since the photographic method was introduced, the magnet has been placed excentrically; the distance of its southern face from the nearest end of the southern knife-edge, being nearly 2 inches, and a space of $4\frac{1}{2}$ inches in the northern part of the iron frame being left disposable. In this disposable space there is attached to the iron frame by three clips a concave mirror of speculum-metal, with its face at right angles to the length of the magnet; it is used in the photographic system (shortly to be described). Near the north end of the iron frame are fixed in it two screw stalks, upon which are adjustible screw-weights; one stalk is horizontal, and the movement of its weight affects the position of equilibrium of the magnet (which depends on the equilibrium between the moments of the vertical force of terrestrial magnetism on the one hand and of the magnet's center of gravity on the other hand); the other stalk is vertical, and the movement of its weight affects the delicacy of the balance, and varies the magnitude of its change of position produced by a change in the vertical force of terrestrial magnetism.

The whole is inclosed in a rectangular box. This box is based upon the stone block above mentioned; and in it, in a space separated from the rest by a thin partition, the magnet can vibrate freely in the vertical plane. In the south side of the box is a hole covered by glass, through which pass the rays of light from the scale to the plane mirror, and through which they are reflected from the plane mirror to the telescope. And at the east end is a large hole covered by glass, through which passes the light from the lamp to the concave mirror, and through which it is reflected to the photographic cylinder (to be described hereafter).

The telescope is fixed to the west side of the brick pier which supports the stone pier in the upper room carrying the declination-theodolite. Its position is symmetrical with that of the telescope by which the horizontal-force-magnet is observed; so that a person seated in a convenient position can, by an easy motion of the head left and right, observe the vertical-force and horizontal-force-magnets.

The scale is vertical: it is fixed to the pier which carries the telescope, and is at a very small distance from the object-glass of the telescope. The wire in the field of view of the telescope is horizontal. The telescope being directed towards the mirror, the observer sees in it the divisions of the scale passing upwards and downwards over the fixed wire as the magnet vibrates. The numbers of the scale increase from top to bottom; so that, when the magnet is placed with its marked end towards the East, increasing readings (as seen with the fixed telescope) denote an increasing vertical force.

OBSERVATIONS RELATING TO THE PERMANENT ADJUSTMENTS OF THE VERTICAL-FORCE-MAGNET.

1. Determination of the compound effect of the declination-magnet, the horizontal-force-magnet, and the iron affixed to the electrometer pole, on the vertical-force-magnet.

The experiments applying to the magnets are given in the volumes for 1840–1841 to 1845: and those applying to the electrometer pole in the volume for 1842. It appeared that no sensible disturbance was produced on the magnet formerly in use. No experiments have been made with the new magnet.

2. Determination of the time of vibration of the vertical-force-magnet in the vertical plane.

In the year 1866, vibrations of the vertical-force-magnet were observed on 140 different days, and with readings of various divisions of the scale. The mean time of vibration adopted for the whole year was $12^{s}\cdot75$.

3. Determination of the time of vibration of the vertical-force-magnet in the horizontal plane.

1866, December 31. The magnet with all its apparatus was suspended from a tripod in the Record Room, its broad side being in a plane parallel to the horizon; therefore, its moment of inertia was the same as when it is in observation. A telescope, with a wire in its focus, was directed to the reflector carried by the magnet. A scale of numbers was placed on the floor of the Record Room, at right angles to the long axis of the magnet, or parallel to the mirror. The magnet was observed only at times when it was swinging through a small arc. From 300 vibrations, the mean time of one vibration $=15^{s}\cdot1873$. This number is used through the year 1866.

4. Computation of the angle through which the magnet moves for a change of one division of the scale; and calculation of the disturbing force producing a movement through one division, in terms of the whole vertical force.

The distance from the scale to the mirror is 186·07 inches, and each division of the scale $=\frac{12}{30\cdot85}$ inches. Hence the angle which one division subtends, as seen from the mirror, is $7'.\ 11''\cdot19$; and therefore the angular movement of the normal to the mirror, corresponding to a change of one division of the scale, is half this quantity, or $3'.\ 35''\cdot60$.

But the angular movement of the normal to the mirror is not the same as the angular movement of the magnet; but is less in the proportion of unity to the cosine of the angle which the normal to the mirror makes with the magnet, or in the proportion of unity to the sine of the angle which the plane of the mirror makes with the magnet. This angle has been found to be 52¾°: therefore, dividing the result just obtained by sine 52¾°, we have, for the angular motion of the magnet corresponding to a change of one division of the scale, 4'. 30''·85.

From this, the value, in terms of the whole vertical force, of the disturbing force producing a change of one division, is to be computed by the formula, "Value of Division in terms of radius × cotan. dip × $\frac{T'^2}{T^2}$" where T' is the time of vibration in the horizontal plane, and T the time of vibration in the vertical plane.

For 1866, T' was assumed = $15^s{\cdot}1873$, T = $12^s{\cdot}75$, dip = 68°. 1'. 16''. From these numbers, the change of vertical force (in terms of the whole vertical force) corresponding to a change of one division of the scale is found = 0·00075194 part of the whole vertical force. This is used through 1866.

5. Investigation of the temperature-correction of the vertical-force-magnet.

An attempt was made to investigate the thermometric correction of the new vertical-force-magnet by the use of heated air, at the same time and in the same manner as for the horizontal-force-magnet (mentioned on pages *xxi* and *xxii*). The results were so much larger than I expected, that I conceive some unknown cause of error to have affected them. At the end of 1867 and the beginning of 1868, experiments were made by heating the air of the room, as is mentioned in page *xxii*, giving a large negative correction. No correction has been applied to the observations with the new vertical-force-magnet.

The method of observing with the vertical-force-magnet is the following:—

A fine horizontal wire is fixed in the field of view of the telescope, which is directed to the small plane mirror carried by the magnet. On looking into the telescope, the graduations of the fixed vertical scale are seen; and during the oscillations of the magnet, the divisions of the scale are seen to pass alternately upwards and downwards across the wire. The clock-time, for which the position of the magnet is to be determined, is the same as that for the other two magnets. The observer applies his eye to the telescope about two vibrations before the arranged time, and if the magnet is in motion he observes its places at four extreme vibrations; and the mean of these is taken as for the horizontal-force-magnet. But if the magnet is at rest, then at one-half time of vibration before the arranged time, and at an equal interval after the arranged time, the division of the scale is noted; if there is a slight difference, the mean is taken.

The number of instances in 1866 in which the magnet was found in a state of vibration is very small.

Outside the box is placed a thermometer, which is read at every hour of observation, and also, till August 31, on two days of every week, and from September 1 on every day except Sundays, at the hours 21^h, 22^h, 23^h, 0^h, 1^h, 2^h, 3^h, and 9^h, in the same manner as that of the horizontal-force-instrument.

A maximum and a minimum thermometer have also been read twice daily; but the results are not printed.

§ 8. *Photographic self-registering Apparatus for Continuous Record of Magnetic Vertical Force.*

The concave mirror which is carried by the vertical-force-magnet is 4 inches in diameter; its mounting has been described in the last article. At the distance of about 22 inches from that mirror, and external to the box, is the horizontal aperture, about $0^{\text{in}}\cdot 3$ in length and $0^{\text{in}}\cdot 01$ in breadth, carried by the same stone block which carries the supports of the agate planes. The lamp which shines through this aperture is carried by a wooden stand. The light reflected from the mirror passes through a cylindrical lens with its axis vertical, very near to the cylinder carrying the photographic paper, and finally forms a well-defined spot of light on the cylinder of paper, at the distance of 100·18 inches from the mirror. As the movements of the magnet are vertical, the axis of the cylinder is vertical. The cylinder is about 15½ inches in circumference, or somewhat larger than that used for the declination and horizontal-force magnets. The forms of the exterior and interior cylinders, and the method of mounting the paper, are in all respects the same as for the declination and horizontal-force magnets; but the cylinder is supported by being merely planted upon a circular horizontal plate (its position being defined by fitting a central hole in the metallic cap of the cylinder upon a central pin in the plate), which rests on anti-friction rollers and is turned by watchwork once in twenty-four hours. The trace of the vertical-force-magnet is on the west side of the cylinder.

On the east side, the cylinder receives the trace produced by the barometer (to be described hereafter). A pencil of light from the lamp which is used for the barometer shines through a fixed aperture with a small cylindrical lens, for tracing a photographic base-line upon the cylinder of paper, similar to that for the cylinder of the declination and horizontal-force magnets.

The scale for the ordinates of the photographic curve of the vertical force is thus computed. Remarking that the radius which determines the range of the motion of the spot of light is double the distance 100·18 inches, and is therefore = 200·36 inches, the formula used in the last section, when applied to $\frac{\text{disturbing force}}{\text{whole vertical force}} = 0\cdot 01$, gives value of division $= 200\cdot 36 \times \text{tan. dip.} \times \left(\frac{\text{T}}{\text{T}'}\right)^2 \times 0\cdot 01$. The value of the ordinate of the photographic curve for $\frac{\text{disturbing force}}{\text{whole vertical force}} = 0\cdot 01$, thus obtained, is, for the year 1866, 3·4987 inches. With this value, the pasteboard scale used for measuring the photographic ordinates has been prepared.

§ 9. *Dipping Needles, and Method of observing the Magnetic Dip.*

The instrument with which all the dips in the year 1866 have been observed, is that which, for distinction, is called Airy's instrument. The following description will probably suffice to convey an idea of its peculiarities:—

The form of the needles, the form of their axes, the form of the agate bearings, and the general arrangement of the relieving apparatus, are precisely the same as those in

Robinson's and other needles. But the form of the observing apparatus is greatly modified, in order to secure the following objects :—

I. To obtain a microscopic view of the points of the needles, as in the instruments introduced by Dr. Lloyd and Lieut.-General Sabine.

II. To possess at the same time the means of observing the needles while in a state of vibration.

III. To have the means of observing needles of different lengths.

IV. To give an illumination to the field of view of each microscope, directed from the side opposite to the observer's eye, so that the light may enter past the point of the needle into the object glass of the microscope, forming a black image of the needle-point in a bright field of view.

V. To give facility for observing by day or night.

With these views, the following form is given to the apparatus :—

The needle, and the bodies of the microscopes, are inclosed in a square box. The base of the box, two vertical sides, and the top, are made of gun-metal (carefully selected to insure its freedom from iron); but the sides parallel to the plane of vibration of the needle are of glass. Of the two glass sides, that which is next the observer is firmly fixed; it is hereafter called "the graduated glass-plate." The other glass side can be withdrawn, to open the box, for inserting the needle, &c.

An axis, whose length is perpendicular to the plane of vibration of the needles, and is as nearly as possible in the line of the axis of the needle, supported on two bearings (of which one is cemented in a hole in the graduated glass-plate, the other being upon a horizontal bar near to the agate support of the needle-axis), carries a transverse arm, about 11 inches long, or rather two arms, projecting about $5\frac{1}{2}$ inches on each side of the axis. Each of these projecting arms has a long opening, or slot, about 1 inch wide, extending from the neighbourhood of the center-work nearly to the end of the arm. Through this opening the tube of a microscope passes, in a direction parallel to the axis of the needle, and is firmly fixed by a shoulder-bearing on one side of the arm, and a circular nut, working in a thread cut upon the microscope-tube, on the other side of the arm. The microscope can thus be fixed at any distance from the central axis, within the limits of the length of the projecting arm. In 1863, between February 24 and May 11, the slot for a single moveable microscope on each side was changed for three fixed microscopes on each side, adapted in position to the lengths of the needles to be mentioned shortly.

The microscope-tube thus carried is not the entire microscope, but so much as contains the object-glass and the field-glass. Upon the plane side of the field-glass (which is turned towards the object-glass), a series of parallel lines is engraved by etching with fluoric acid. The object-glass is so adjusted that the image of the needle-point is formed upon the plane side of the field-glass; and thus the parallel lines can be used for observing the needle in a state of vibration; and, one of them being adopted as standard, the lines can be used for reference to the graduated circle (to be mentioned). All this requires that there be an eye-glass also for the microscope.

The axis of which we have spoken is continued through the graduated glass-plate, and there it carries another transverse arm parallel to the former, and generally similar to it. In each part of this slides a short eye-piece, carrying the eye-glass. In 1863, at the time mentioned above, the slotted arm and moveable eye-socket were changed for an arm with three sockets and eye-glasses. Thus, reckoning from the observer's eye, there are the following parts :—

(1.) The eye-glass.

(2.) The graduated glass-plate (its graduations, however, not intervening in this part of the glass, the graduated circle being so large as to include all the microscopes).

(3.) The field-glass, on the further surface of which the parallel lines are engraved.

(4.) The object-glass.

(5.) The needle.

(6.) The removeable glass side of the box.

(7.) The illuminating reflector, to be described hereafter.

The optical part of the apparatus being thus described, we may proceed to speak of the graduated circle.

The graduations of the circle (whose diameter is about 9¾ inches) are etched on the inner surface of the graduated glass-plate. These divisions (as well as the parallel lines on the field glasses of the microscopes) are beautifully neat and regular, and are, I think, superior to any that I have seen on metal. The same piece of metal, which carries the transverse arms supporting the microscope bodies, carries also two arms with verniers for reading their graduations. These verniers (being adapted to transmitted light) are thin plates of metal, with notches instead of lines. The reading of the verniers is very easy. The portion of the axis which is external to the graduated glass-plate (towards the observer), and which has there, as already stated, two arms for carrying the microscope eye-glasses, has also two arms for carrying the lenses by which the verniers and glass-plate graduations are viewed. These four arms are the radii of a circle, which can be fixed in position by a clamp, attached to the gun-metal casing of the graduated glass-plate, and furnished with the usual slow-motion screw.

The entire system of the two arms carrying the microscope-bodies, the two arms carrying the microscope eye-glasses, the two arms carrying the verniers, and the two arms carrying the reading-glasses for the verniers, is turned rapidly by means of a button on the external side of the graduated glass-plate, or is moved slowly by means of the slow-motion screw just mentioned.

It now remains only to describe the illuminating apparatus. On the outside of the removeable glass plate, there are supports for the axis of a metallic circle turning in a plane parallel to the plane of needle-vibration. This circle has four slotted radii, and in these slots or openings there slide small frames carrying prismatic glass reflectors, each of which can turn on an axis, in the plane of the circle but transverse to the radius. Two of these reflectors are for the purpose of sending light through the verniers, and therefore are fixed in radial distance; the other two were intended for sending light past the ends of the needle through the microscopes, and therefore required adjustment on change of needle and corresponding change of position of microscopes. In 1863 these were changed for fixed reflectors, corresponding to the fixed microscopes. The circle was originally turned by a small winch near the observer's hand; at present, the winch is removed, as its axis was found to be slightly magnetic. At each observation, it is necessary to turn the circle which carries the reflectors; but this is the work of an instant.

The light which illuminates the whole is a gas-burner, in the line of the axis of rotation. Its rays fall upon the glass prisms, and each of these is adjusted, by turning on its axis, to throw the reflected light in the required direction.

The whole of the apparatus, as thus described, is planted upon a horizontal plate admitting of rotation in azimuth: the plate is graduated in azimuth, and verniers are fixed to the gun-metal tripod stand. The gas-pipe is led down the central vertical axis, and there communicates by a rotatory joint with the fixed gas-pipes.

The needles adapted for use with this instrument are—

B_1, a plain needle	each 9 inches long.
B_2, a plain needle	
B_3, a loaded needle with adjustible load	
B_4, a needle whose plane passes through the axis of the needle	
C_1, a plain needle	each 6 inches long.
C , a plain needle	
C_3, a loaded needle with adjustible load	
C_4, a needle whose plane passes through the axis of the needle	
D_1, a plain needle	each 3 inches long.
D_2, a plain needle	
D_3, a loaded needle with adjustible load	
D_4, a needle whose plane passes through the axis of the needle	

The needles constantly employed are B_1, C_1, D_1, B_2, C_2, D_2.

In discussing carefully the observations taken with this instrument (as well as with other dip-instruments), great trouble was experienced in determining the zenith-point (or reading of the vertical circle when the points of the needle are in the same vertical). To remedy this, a "zenith-point-needle" was constructed under my instructions by Mr. Simms; and it was used as need required in 1864 and 1865. It is a flat bar of brass; with pivots similar to those of the dip-needles; and with three pairs of points corresponding to the three lengths of needles used; loaded at one end so as to take a position perfectly definite with respect to the direction of gravity; observed with the microscopes, and reversed for another observation, exactly as the dip-needles. For each of the different lengths of dip-needles, the zenith-point is determined by observation of that pair of points of the zenith-point-needle whose interval is the same as the length of the dip-needle.

Discordances, of which no satisfactory explanation could be given, were at first found in the ordinary use of the instrument for determination of dip, as well as in the change of readings when a needle was raised and lowered, and in the change of readings when, without raising the needle, the instrument was turned completely in azimuth. Between November 10 and November 19, 1864, Mr. Simms reground the agate edges on which the needle-pivots rotate; and the discordances have entirely or in great measure disappeared. The process of regrinding was merely the following. A brass tool was provided which nearly fitted the agates, and which permitted lengthwise-strokes but scarcely permitted cross-strokes; and this tool carried, in succession, the different powders required for shaping and polishing the agate edges. As the edges were pretty well shaped, it was scarcely necessary to use coarse emery; but fine emery was used in the tool to give a final figure, and tin-oxide to give the ultimate polish. The process scarcely differs from that by which the edges had been ground originally; except that a tool had formerly been used which perhaps admitted of too much cross-stroke, and that rotten-stone powder had been used instead of tin-oxide.

The flat needles B_4, C_4, D_4, were used with the object of determining whether any part of the discordances of results arose from the position of the principal plane of the magnetized needle. But with the increased harmony of results, an error showed itself which is peculiar to their form. The small flexure of the needle, produced by the resolved part of gravity in the direction perpendicular to the needle's length, changes the position of its centre of gravity in such a manner that the action of gravity is necessarily opposed to that of the magnetic vertical force; and thus the apparent dip is made too small. This error is perhaps insensible in the 3-inch needle D_4, but it is visible in the 6-inch needle C_4, and conspicuous in the 9-inch needle B_4. In the tables of results, therefore, while I have included all the separate results from these needles, I have omitted them in the formation of means. After 1865, July, the flat needles were not used for dip observations.

Needles C_1 and D_1, which had been removed by Mr. Simms on 1865, December 30, were returned on 1866, January 25.

§ 10. *Observations for the absolute Measure of the Horizontal Force of Terrestrial Magnetism.*

In the spring of 1861, a Unifilar Instrument, similar in all respects (as is understood) to those used in and issued by the Kew Observatory, was procured by the courteous application of Lieut.-General Sabine, from the makers, Messrs. J. T. Gibson and Son; and after having been subjected to the usual examinations, at the Kew Observatory, for determination of its constants (for which I am indebted to the kindness of Balfour Stewart, Esq.), was mounted at the Royal Observatory. Observations with this instrument commenced on 1861, June 11, and were continued through the year; and, after some slight modifications of its verniers, it is still maintained in use (1868).

The deflected magnet (whose use is merely to ascertain the proportion which the power of the deflecting magnet at a given distance bears to the power of terrestrial magnetism) is 3 inches long, carrying a small plane mirror. The deflecting magnet is 4 inches long; it is a hollow cylinder, carrying in its internal tube a collimator, by means of which its time of vibration is observed in another apparatus. The frame which supports the suspension-piece of the deflected magnet carries also the telescope directed to the magnet-mirror; it rotates round the vertical axis of a horizontal graduated circle whose external diameter is 10 inches. The deflecting magnet is always placed on the E. or W. side of the deflected magnet, with one end towards the deflected magnet. In the reduction of the observations, the precepts contained in the Skeleton Form prepared by the Kew Observatory have received the strictest attention.

The following is the explanation of the method of reduction.

The distance of the centers of the deflected and deflecting magnet being known, it is supposed (from observations made at Kew, of which the details have not reached me) that the magnetism of the deflecting magnet is so altered by induction that the following multipliers ought to be used in computing the Absolute Force:—

At distance 1·0 foot, factor is	1·00031
1·1	1·00023
1·2	1·00018
1·3	1·00014
1·4	1·00011
1·5	1·00009

The correction of the magnetic power for temperature t_0 of Fahrenheit, reducing all to 35° of Fahrenheit, is

$$0·000131261\,(t_0-35)+0·000000259\,(t_0-35)^2$$

A_1 is $\frac{1}{2}(\text{distance})^3 \times$ sine deflection, corrected by the two last-mentioned quantities, for distance 1 foot; A_2 is the similar expression for distance 1·3 foot; A'_2 is $\frac{A_2}{(1·3)^2}$: P is $\frac{A_1-A_2}{A_1-A'_2}$. A mean value of P is adopted from various observations; then $\frac{m}{X}=A_1 \times \left(1-\frac{P}{1}\right)$ for smaller distance, or $= A_2 \times \left(1-\frac{P}{1·69}\right)$ for larger distance. The mean of these is usually adopted for the true value of $\frac{m}{X}$.

For computing the value of mX from observed vibrations, it is necessary to know K, the moment of inertia of the magnet as mounted. The value of log. π^2K furnished by Mr. Stewart is 1·66073 at temperature 30° and 1·66109 at temperature 90°. Then, putting T for the time of the magnet's vibration as corrected for induction, temperatrue, and torsion-force, the value of mX is $= \frac{\pi^2K}{T^2}$. From the combination of this value of mX with the former value of $\frac{m}{X}$, m and X are immediately found.

It appears, from a comparison of observations given in the Introduction to the *Magnetical and Meteorological Observations*, 1862, that the determinations with the Old Instrument (in use to 1861) ought to be diminished by $\frac{1}{117}$ part, to make them comparable with those of the Kew Unifilar.

The computation of the values of m and X has, to the year 1857, been made in reference to English measure only, using the foot and the grain as the units of length and weight; but, for comparison with foreign observations of the Absolute Intensity of Magnetism, it is desirable that X should be expressed also in reference to French measure, in terms of the millimètre and milligramme. If an English foot be supposed equal to α times the millimètre, and a grain be equal to β times the milligramme, then it is seen that, for the reduction of $\frac{m}{X}$ and mX to French measure, these must be multiplied by α^3 and $\alpha^2\beta$ respectively. Hence X^2 must be multiplied by $\frac{\beta}{\alpha}$, and X by $\sqrt{\frac{\beta}{\alpha}}$. Assuming that the mètre is equal to 39·37079 inches, and the gramme equal to 15·43249 grains, log. $\sqrt{\frac{\beta}{\alpha}}$ will be found to be $= 9·6637805$, and the factor for reducing the English values of X to French values will be 0·46108 or $\frac{1}{2·1689}$. The values of X in French measure thus derived from those in English measure are given in the proper table.

§ 11. *Explanation of the Tables of Indications of the Magnetometers.*

The Indications are derived entirely from the measures of the ordinates of the Photographic Curves, except in a few instances in which the results are marked with an asterisk, in which case the results are those given by eye-observations, usually because the photographic process has failed.

Telescope-observations of the Magnetometers have usually been made four times every day, except on Sundays, on which days two or three observations only have been taken; but, though these observations are employed in forming the base lines on the photographic sheets, their immediate results are not necessarily given in the Tables.

For each photographic record, a new base-line, representing a convenient reading in round numbers of the element to which it applies, has been drawn on the sheet. Then the Assistant, who is charged with the translation of the curve-ordinates into numbers, remarks the salient points of the curve, or the points which if connected by straight lines would produce a polygon not sensibly differing from the photographic curve; to each of these he applies the pasteboard scale proper for the element under consideration; the base of the pasteboard scale determines the time on the time-scale, and the reading of the pasteboard scale for the point of the photographic curve gives the quantity which is to be added to the value for the new base-line. The ordinate-reading so formed is printed without alteration in the Tables. It is particularly to be remarked that the indications for horizontal force and vertical force are *not corrected for temperature.*

In measuring the ordinates of the Vertical Force Curves, the same difficulty that is mentioned in preceding volumes has still occasionally, though rarely, been felt. Apparently without cause, the curve is dislocated; one part being raised above or depressed below the contiguous part, in the direction of the ordinate, usually by small quantities. In all cases the displacement is accompanied by vibration, the original position being at the extremity of the arc of vibration, and the new position being at its center; showing that there has been no want of delicacy in the movement, and that the change is precisely the same as would be caused by the quiet application of a small weight upon one end of the magnet.

In translating the ordinates into numbers on these occasions, two ordinates have been taken for the same abscissa; these are connected, in the printed Indications, by a brace, and the difference of the numbers indicates the amount of the disturbance.

§ 12. *Wires and Photographic self-registering Apparatus for continuous Record of Spontaneous Terrestrial Galvanic Currents.*

In order to obtain an exhibition of the spontaneous galvanic currents which in some measure are almost always discoverable in the earth, and which occasionally are very powerful, it was necessary to extend two insulated wires from an earth connexion at the Royal Observatory, in two directions nearly at right angles to each other, to considerable distances, where they would again make connexion with the earth. By the kindness of the Directors of the South Eastern Railway Company, to whom the Royal Observatory has on several occasions been deeply indebted, two connexions are made; one to a station near Dartford, at the direct distance $9\frac{3}{4}$ miles nearly, in azimuth (measured from North, to East, South, West), 102° astronomical or 122° magnetical, the length of the connecting wire being about $15\frac{5}{8}$ miles; the other to a station near Croydon, at the direct distance 8 miles, in azimuth, 209° astronomical, or 229° magnetical, the length of the connecting wire being about $10\frac{1}{2}$ miles. At these two stations connexion is made with earth. The details of the course are as follows. The wires are soldered to a water pipe in the Magnetic Ground at the Royal Observatory. Thence they enter the Magnetic Basement, and pass through the photographic self-registering apparatus (to be shortly described). From it they are led up the electrometer mast to a height exceeding 50 feet, and thence they are swung across the grounds to a chimney above the Octagon Room. They descend thence, and are led to a terminal board in the Computing Room, to which an intermediate galvanometer can be attached for eye-observation of the currents. From this point they are led to the "Battery Basement," and, with other wires, pass under the Park to the Greenwich Railway Station, and upon the telegraph poles. One wire branches off at the junction with the North Kent Railway to Dartford, the other at the junction with the Croydon Branch Railway to Croydon. At both places their connexion with earth is made by soldering to waterpipes, as at the Royal Observatory.

The apparatus for receiving the effects of the galvanic currents consists essentially of two magnetic needles (one for each wire), each suspended by a hair so as to vibrate horizontally within a galvanic coil, exactly as in the ordinary speaking telegraph; these coils being respectively in the courses of the two long wires. A current of one kind, in either wire, causes the corresponding needle to turn itself through an angle nearly proportioned to the strength of the current, in one direction; a current of the opposite kind causes it to turn in the opposite direction. These turnings are registered by the following apparatus.

The carrier of each magnet carries also a small plane mirror, which receives all the azimuthal motions of the magnet. The light of a gas-lamp passes through a minute aperture, and shines upon it; the divergent pencil is converted into a convergent pencil by refraction through crossed cylindrical lenses (with axes vertical before the pencil reaches the mirror, and with axes horizontal where the pencil is received from the mirror), which, under the circumstances, were more convenient than spherical lenses. A spot of light is thus formed upon the photographic paper wrapped upon a cylinder of ebonite, which is covered by a glass cylinder, and made to rotate in twenty-four hours by clock-work, exactly as for the register of the magnetic elements. As in the case of declination and horizontal-force, the two earth currents make their registers upon opposite sides of the same barrel, and upon different parts of the sheet; the same gaslight serving for the illumination of both.

A portion of a base-line for either record is obtained at any time by simply breaking the galvanic communication.

The photographic records have been regularly made since 1865, March 15. Seventeen days have been selected for special examination, and for these the equivalent galvanic currents in the north and west directions have been computed, and their effects in producing apparent magnetic disturbances in the west and north directions have been inferred. They correspond almost exactly with those indicated by the magnetometers. The discussion of these has been communicated to the Royal Society.

§ 13. *Standard Barometer.*

The Barometer is a standard, by Newman, mounted in 1840. It is fixed on the South wall of the West arm of the Magnetic Observatory. The graduated scale which measures the height of the mercury is made of brass, and to it is affixed a brass rod, passing down the inside of one of the upright supports, and terminating in a conical point of ivory; this point in observation is made just to touch the surface of the mercury in the cistern, and the contact is easily seen by the reflected and the actual point appearing *just* to meet each other. The rod and scale are made to slide up and down by means of a slow-motion screw. The scale is divided to $0^{\text{in}}\cdot05$.

The vernier subdivides the scale divisions to $0^{\text{in}}\cdot002$; it is moved by a slow-motion screw, and in observation is adjusted so that the ray of light, passing under the back and front of the semi-cylindrical plate carried by the vernier, is a tangent to the highest part of the convex surface of the mercury in the tube.

The tube is $0^{in}\cdot565$ in diameter; the correction for the effect of capillary attraction is therefore only $+ 0^{in}\cdot002$. The cistern is of glass.

At the bottom of the instrument are three screws, turning in the fixed part of the support, and acting on the piece in which the lower pivot of the barometer-frame turns, for adjustment to verticality: this adjustment is examined weekly.

The readings of this barometer, until 1866, August 20^d, 0^h, are considered to be coincident with those of the Royal Society's flint-glass standard barometer. On that day a change was made in the barometer. It had been remarked that the slow-motion-screw at the bottom of the sliding rod (for adjusting the ivory point to the surface of the mercury in the cistern) was partly worn away: and on August 20 the sliding rod was removed from the barometer by Mr. Zambra to remedy this defect. It was restored on August 30^d, 3^h. Before the removal of the sliding rod, barometric comparisons had been made with a standard barometer the property of Messrs. Murray and Heath, and with two barometers, Negretti and Zambra, Nos. 646 and 647. While the sliding rod of the Greenwich standard was removed, Negretti and Zambra 647 was used for daily observations. After the new equipment of the standard barometer, another series of comparisons with the same barometers was made: from which it was found (the three auxiliaries giving accordant results) that the readings of the barometer, in its new state, required a correction of $- 0^{in}\cdot006$. This is applied in the printed observations commencing with August 30.

All observations of this barometer have been corrected for the difference of temperature of the mercury in the tube at the time of observation from 32°, by the application of the corrections contained in the table for barometers whose scales are engraved upon a rod of brass reaching from the level of the mercury to the vernier. (See the report of the Committee of Physics and Meteorology approved by the Royal Society.)

The height of the cistern above the mean level of the sea is 159 feet. This element is founded upon the determination of Mr. Lloyd, in the *Phil. Trans.*, 1831; the elevation of the cistern above the brass piece inserted in a stone in the transit-room (to which Mr. Lloyd refers) being $5^{ft}.2^{in}$.

The barometer has been read at 21^h, 0^h, 3^h, 9^h (astronomical), on every day, excepting on Sundays, and on Good Friday and Christmas Day, on which days fewer observations have been taken. Every reading has been reduced to the reading which would have been obtained at the temperature 32° of the mercury and scale, by application of the correction given in Table II. (pages 82 to 87) of the Report of the Committee of Physics of the Royal Society. The mean of the reduced readings has then been taken for each civil day, and finally converted into mean daily reading, by application of the correction inferred from Mr. Glaisher's paper in the *Philosophical Transactions*, 1848, Part I, Table I, page 127.

In the printed record of the barometrical and all other meteorological observations, the day is to be understood, generally, as defined in civil reckoning.

§ 14. *Photographic self-registering Apparatus for continuous Record of the Readings of the Barometer.*

The Photographic self-registering Apparatus for continuous Record of Magnetic Vertical Force is furnished (as has been stated) with a vertical cylinder covered with photographic paper and revolving in 24 hours. North of the surface of this cylinder, at the distance of about 30 inches, is a large syphon barometer, the bore of the upper and lower extremities of its arms being about 1·1 inch. A glass float partly immersed in the quicksilver of the lower extremity is partially supported by a counterpoise acting on a light lever (which turns on delicate pivots), so that the wire supporting the float is constantly stretched, leaving a definite part of the weight of the float to be supported by the quicksilver. This lever is lengthened to carry a vertical plate of opaque mica with a small aperture, whose distance from the fulcrum is nearly eight times the distance of the point of attachment of the float wire, and whose movement, therefore, is nearly four times the movement of the column of a cistern-barometer. Through this hole the light of a lamp, collected by a cylindrical lens, shines upon the photographic paper.

The scale of time is established by means of occasional interruptions of the light, and the scale of measure is established by comparison with occasional eye-observations.

This barometer was brought into use in 1848, but its indications were not satisfactory till the mercury was boiled in the tube by Messrs. Negretti and Zambra on 1853, August 18, since which time they have appeared unexceptionable. Results of the indications are printed in the *Maxima and Minima of the Barometer*, near the end of the Meteorological Results.

§ 15. *Thermometers for ordinary Observation of the Temperature of the Air and Evaporation.*

The Dry-Bulb Thermometer, the Wet-Bulb Thermometer, the Maximum Self-Registering Thermometers, both dry and wet, and the Minimum Self-Registering Thermometers, dry and wet, all for determination of the temperature of the air and of evaporation, are mounted on a revolving frame whose fixed vertical axis is planted in the ground. From the year 1846 to 1863 the post forming the vertical axis was about 23 feet south (magnetic) of the S.S.E. angle of the south arm of the Magnetic Observatory; in 1863 it was moved to a position about 35 feet south (astronomical) of the south angle. A frame revolves on this post, consisting of a horizontal board as base, of a vertical board projecting upwards from it connected with one edge of the horizontal board, and of two parallel inclined boards (separated about three inches) connected at the top with the vertical board, and at the bottom with the other edge of the horizontal board. The outer inclined board is covered with zinc. The air passes freely between all these boards.

The dry and wet-bulb thermometers are attached to the outside, and near the center of the vertical board; the maximum and minimum thermometers for air towards one vertical edge, and those for evaporation towards the other vertical edge, with their bulbs at almost the same level, and near to those of the dry and wet-bulb thermometers; their bulbs are about 4 feet above the ground and projecting from 2 inches to 3 inches below the horizontal board. Above the thermometers is a small projecting roof to protect them from rain. The frame is always turned with the inclined side towards the sun. It is presumed that the thermometers are thus sufficiently protected.

The graduations of all the thermometers used in the Royal Observatory rest fundamentally upon those of a Standard Thermometer, the property of Mr. Glaisher, which derives its authority from comparison with original thermometers constructed by the late Rev. R. Sheepshanks about the years 1840–1843, in the course of his preparations for the construction of the National Standard of Length. The whole of the radical determinations of Freezing Point, Boiling Point, and Subdivision of Volume of Tube, were made by Mr. Sheepshanks with the utmost care: it is believed that these were the first original thermometers that had been constructed in England for many years. Mr. Glaisher's thermometer has been adopted as the standard of reference for all the thermometers used in the Royal Observatory since 1840.

The Dry-Bulb Thermometer is by Newman. The corrections required for its readings, as found by comparison with the standard above-mentioned, are as follows:—

Between 8° and 11°	subtract 0°·4
12 and 19	0·5
20 and 24	0·6
25 and 30	0·7
31 and 37	0·8
38 and 44	0·9
45 and 52	1·0
53 and 59	1·1
60 and 64	1·2
65 and 68	1·3
69 and 71	1·4
72 and 74	1·5
75 and 77	1·6
78 and 79	1·7
80 and 82	1·8
83 and 84	1·9
85 and 86	2·0
87 and 90	2·1
91 and 95	2·2
96 and 100	2·3
101 and 104	2·4

The wet-bulb thermometer, with pea-bulb, by Negretti and Zambra No. 764, was used until 1866, January 17^{d}. 21^{h}.

January 18^{d}. 0^{h}, a new thermometer by Negretti and Zambra, with a bulb of the same size as that of the dry-bulb thermometer, was brought into use.

The corrections required to the readings of this thermometer are—

Between 32° and 49°	0°·0
50 and 81	add 0·2
82 and 91	0·0
92 and 105	subtract 0·2

Dry-bulb and wet-bulb thermometers, with pea-bulbs and porcelain scales, Negretti and Zambra 795, are also mounted on the roof of the library, 4 feet above the leads and 22 feet above the ground.

The corrections for index error for these thermometers are—

Dry bulb:

Between 32° and 54°	0°·0
55 and 102	add 0·2

Wet bulb:

Between 32° and 70°	add 0°·2
71 and 83	0·1
84 and 102	0·0

1866, August 8^d. 9^h. These thermometers (No. 795) and stand were blown over by the wind. The thermometers were broken.

1866, September 1^d. 0^h. New dry-bulb and wet-bulb thermometers (Negretti and Zambra No. 1179) were set up on the roof of the Library. These thermometers are similar to those broken on August 8^d. 9^h. No corrections are applied to the readings of thermometers No. 1179.

The eye-readings of the dry-bulb and wet-bulb thermometers have usually been taken at the hours (astronomical reckoning) 21^h, 0^h, 3^h, 9^h, and corrected by application of the numbers given above.

They are not printed in the present volume.

The dew-point has been inferred exclusively from the simultaneous observations of the dry-bulb and wet-bulb thermometers, by multiplying the difference between the readings of these thermometers by a factor peculiar to the temperature of the air, and subtracting the product from the reading of the dry-bulb thermometer. These factors have been found by Mr. Glaisher from the comparison of a great number of dew-point determinations, obtained by use of Daniell's hygrometer, with simultaneous observations of dry-bulb and wet-bulb thermometers. The first part of this investigation was published in full, in the volume of *Magnetical and Meteorological Observations* for 1844, pages 67–72; it was based upon all the observations made up to that time. Subsequently, the comparison was extended to include all the simultaneous observations of these instruments made at the Royal Observatory, Greenwich, from 1841 to 1854, with some observations taken at high temperatures in India, and others at low and medium temperatures at Toronto. The results at the same temperature were found to be the same at these different localities, so far as the climatic circumstances permitted comparison. (See Glaisher's Hygrometrical Tables, 4th Edition). The following table exhibits the result of the entire comparison; it has been used in forming the dew-points in the present volume.

TABLE OF FACTORS by which the DIFFERENCE of READINGS of the DRY-BULB and WET-BULB THERMOMETERS is to be MULTIPLIED in order to PRODUCE the DIFFERENCE between the READINGS of the DRY-BULB and DEW-POINT THERMOMETERS.

Reading of Dry-bulb Thermometer.	Factor.	Reading of Dry-bulb Thermometer.	Factor.	Reading of Dry-bulb Thermometer.	Factor.	Reading of Dry-bulb Thermometer.	Factor.
10°	8·78	33°	3·01	56°	1·94	79°	1·69
11	8·78	34	2·77	57	1·92	80	1·68
12	8·78	35	2·60	58	1·90	81	1·68
13	8·77	36	2·50	59	1·89	82	1·67
14	8·76	37	2·42	60	1·88	83	1·67
15	8·75	38	2·36	61	1·87	84	1·66
16	8·70	39	2·32	62	1·86	85	1·65
17	8·62	40	2·29	63	1·85	86	1·65
18	8·50	41	2·26	64	1·83	87	1·64
19	8·34	42	2·23	65	1·82	88	1·64
20	8·14	43	2·20	66	1·81	89	1·63
21	7·88	44	2·18	67	1·80	90	1·63
22	7·60	45	2·16	68	1·79	91	1·62
23	7·28	46	2·14	69	1·78	92	1·62
24	6·92	47	2·12	70	1·77	93	1·61
25	6·53	48	2·10	71	1·76	94	1·60
26	6·08	49	2·08	72	1·75	95	1·60
27	5·61	50	2·06	73	1·74	96	1·59
28	5·12	51	2·04	74	1·73	97	1·59
29	4·63	52	2·02	75	1·72	98	1·58
30	4·15	53	2·00	76	1·71	99	1·58
31	3·70	54	1·98	77	1·70	100	1·57
32	3·32	55	1·96	78	1·69		

The maximum self-registering thermometer is a mercurial thermometer, of the construction invented by Messrs. Negretti and Zambra. There is a small detached piece of glass in the tube, just above a bent part of the tube (near the bulb), through which the piece of glass cannot pass down. The column of mercury in rising lifts the glass up and passes freely; but in descending it is unable to pass the glass, and the lower mass of mercury descends, leaving a vacant space below the glass, and leaving a portion of the mercury above it. The piece of glass operates as an efficient valve. The corrections to the readings of this thermometer are as follows:—

Between 32° and 54° .... subtract 0°·3
54 and 72 .... 0·2
72 and 80 .... 0·1
80 and 93 .... 0·0
93 and 96 ....add 0·1
96 and 99 .... 0·2
99 and 102 .... 0·4

There is a similar thermometer for the maximum wet-bulb reading (Negretti and Zambra No. 198): the corrections to its readings are—

Between 32° and 36	subtract	0·4
36 and 101		0·6

On 1866, May 9, the maximum wet thermometer (Negretti and Zambra No. 198) was found out of order.

On May 18, the maximum thermometer (Browning No. 1170) was mounted in its place, and was kept in use till May 25.

On May 25, a new maximum thermometer (Negretti and Zambra No. 7892) was brought into use.

On August 15d. 21h. the maximum thermometer (Negretti and Zambra No. 7892) was broken.

On August 24d. 21h. a new maximum thermometer (Negretti and Zambra No. 7537) was brought into use, and was used throughout the remainder of the year.

No corrections are applied to readings of Browning No. 1170; Negretti and Zambra No. 7892; and Negretti and Zambra No. 7537.

The minimum self-registering thermometers are alcohol thermometers, of the construction known as Rutherford's. A sliding glass index allows the alcohol in rising to pass above it, but is drawn down by the peculiar action of the bounding surface of the fluid when it sinks. The readings of that which gives the minimum temperature of the air require the following corrections, viz.:—

Below 12	add	0·2
Between 13 and 18		0·3
19 and 25		0·4
26 and 35		0·5
36 and 39		0·6
40 and 43		0·7
44 and 47		0·8
48 and 50		0·9
51 and 54		1·0
55 and 57		1·1
58 and 61		1·2
62 and 64		1·3
65 and 67		1·4
68 and 70		1·5
71 and 74		1·6
75 and 77		1·7
78 and 80		1·8

The readings of the minimum wet-bulb thermometer require the following corrections:—

Between 31° and 37°	add	1°·0
37 and 78		0·7

The mean daily values of dry thermometer in the printed columns are found by combining two results derived from different sources. The first and simpler result is the mean of the maximum and minimum, corrected by a small quantity depending on the month, given in Table III. of Mr. Glaisher's paper in the *Philosophical Transactions*, 1848, page 130. The second result is formed by taking the means of the four eye-observations at 21^h, 0^h, 3^h, 9^h, and applying a correction thus investigated. The daily range being found by taking the difference between the maximum and minimum, this daily range is multiplied by the mean of the factors in Table IV. of Mr. Glaisher's paper before mentioned corresponding to the hours of observation; the application of this correction to the mean of the eye-observations gives the second result. (It is evident that this process is applicable to any number of eye-observations.) These two results are then combined to form a mean, weights being given proportional to the number of observations contributing to each result.

For the mean daily value of dew point, the usual process is,—by observing the difference between dry and wet thermometers, and by use of the table of factors printed in page *xl.* above, to form the difference between air-temperature and dew point at each of the hours of reading; to take the mean of the deduced dew-points, and to apply a correction which is the mean of the corrections in Mr. Glaisher's Table VIII. for the several hours of observation. Sometimes, however, the following process is used. The correction for diurnal range applicable to the mean of the eye-observations of the dry thermometer having been found (as is described above), this correction is multiplied by a fraction, whose numerator is the mean of corrections to wet bulb thermometer in Table VII. for the hours of observations, and whose denominator is the mean of corrections to dry thermometer in Table II. for the same hours; and thus a correction is found which is applied to the mean of the eye-observations of wet bulb thermometer, to form the mean wet bulb for the day. Then by use of the mean dry bulb reading for the day and the mean wet bulb reading for the day and the table of factors above, the mean dew point for the day is formed.

§ 16. *Photographic self-registering Apparatus for continuous Record of the Readings of the Dry-Bulb and Wet-Bulb Thermometers.*

About 28 feet south (magnetic) of the south-east angle of the south arm of the Magnetic Observatory, and about 25 feet east of the thermometers for eye-observations, is a shed 10 ft. 6 in. square, standing upon posts 8 feet high, under which are placed the photographic thermometers, the dry-bulb thermometer towards the east, and the wet-bulb thermometer towards the west. The bulbs of the thermometers are 8 inches in length, and 0·4 inch internal bore, and their centers are about 4 feet above the ground. The bulb of one of the thermometers is covered with muslin throughout its whole length, which is kept moist by means of capillary passage of water along cotton wicks leading to a vessel filled with water.

There are small adjustments admitting the raising or dropping of the thermometers, so that the register of their changing readings may be on a convenient part of the paper. The thermometer frames are covered by plates having longitudinal apertures, so narrow, that any light which may pass through them is completely, or almost completely, intercepted by the broad flat column of mercury in the thermometer-tube. Across these plates a fine wire is placed at every degree; and at the decades of the degrees, and also at 32°, 52°, and 72°, a coarser wire is placed. A gas lamp is placed about 9 inches from each thermometer (east of the dry bulb and west of the wet bulb), and its light, condensed by a cylindrical lens, whose axis is vertical, shines through the thermometer-tube above the surface of the mercury, and forms a well-defined line of light upon the photographic paper, which is wrapped around the cylinder. The axis of this cylinder is vertical; its mounting is in all respects similar to that of the Vertical Force cylinder. As the cylinder, covered with photographic paper, revolves under the light, which passes through the thermometer-tube, it receives a broad sheet of photographic trace, whose breadth (in the direction of the axis of the cylinder) varies with the varying height of the mercury in the thermometer-tube. The light in its passage is intercepted by the wires placed across the tube at every degree, and there are, therefore, left upon the paper corresponding lines in which there is no photogenic action.

The cylinder revolves in 48 hours; the daily photographic traces of the two thermometers are thus simultaneously registered on opposite sides of the cylinder without intermixing. The length of the cylinder is 13½ inches, and its circumference is 19 inches.

§ 17. *Thermometers for Solar Radiation and Radiation to the Sky.*

The thermometer for Solar Radiation, which to the end of the year 1864 was placed in an open box about 10 feet south of the south-west angle of the south arm of the Magnetic Observatory, is now laid on the grass, near the same place.

The thermometer is a self-registering maximum mercurial thermometer of Negretti and Zambra's construction; its bulb is blackened, and enclosed in a glass sphere from which the air has been exhausted. Its graduations are correct, and the numbers inserted in the tables are those read from the instrument without alteration. The thermometer is read at 9^h a.m., noon, 3^h p.m., and occasionally at 9^h p.m.; the highest of these readings is adopted as the maximum for the day.

The use of a thermometer with blackened bulb not inclosed in an exhausted sphere was discontinued at the end of 1865.

The thermometer for radiation to the sky is placed near to the Solar Radiation thermometer, with its bulb resting on short grass, and fully exposed to the sky. It is a self-registering minimum spirit thermometer of Rutherford's construction, made by Negretti and Zambra. Its graduation is correct, and the numbers inserted in the table are those read from the scale without alteration. It is read every day at 9^h a.m., and occasionally at 9^h p.m.

This thermometer was out of order on March 8, April 26, June 29, July 26, September 17 and 23.

§ 18. *Thermometers sunk below the Surface of the Soil at different Depths.*

These thermometers were made by Messrs. Adie of Edinburgh, under the immediate superintendence of Professor (now Principal) J. D. Forbes. The graduation was made by Professor Forbes himself.

The thermometers are four in number. They are all placed in one hole in the ground, the diameter of which in its upper half is 1 foot, and in its lower half about 6 inches. Each thermometer is attached in its whole length to a slender piece of wood, which is planted in the hole with it. The place of the hole is 20 feet south of the extremity of the south arm of the Magnetic Observatory, and opposite the center of its south front.

The soil consisted of beds of sand; of flint-gravel with a large proportion of sand; and of flints with a small proportion of sand, cemented almost to the consistency of pudding-stone. Every part of the gravel and sand extracted from the hole was perfectly dry.

The bulbs of the thermometers are cylindrical, 10 or 12 inches long and 2 or 3 inches in diameter. The bore of the principal part of the tubes, from the bulb to the graduated scale, is very small. In that part to which the scale is attached, the tube is larger.

The thermometer No. 1 was dropped into the hole to such a depth that the center of its bulb was 24 French feet (25·6 English feet) below the surface: then dry sand was poured in till the hole was filled to nearly half its height. Then No. 2 was dropped in till the center of its bulb was 12 French feet below the surface; No. 3 and No. 4 till the centers of their bulbs were respectively 6 and 3 French feet below the surface; and the hole was then completely filled with dry sand. The upper parts of the tubes, carrying the scales, were left projecting above the surface: No. 1 by 27·5 inches, No. 2 by 28·0 inches, No. 3 by 30·0 inches, and No. 4 by 32·0 inches. Of these lengths, the parts 8·5, 10·0, 11·0, and 14·5 inches, respectively are tube with narrow bore.

The projecting parts of the tubes are protected by a wooden case or box fixed to the ground; the sides of the box are perforated with numerous holes, and it has a double roof. In the North face of this box is a large plate of glass through which the thermometers are read. Within the box are two smaller thermometers, one (No. 5) whose bulb is sunk one inch in the ground, and one (No. 6) whose bulb is in the free air nearly in the center of the box.

The fluid of the four long thermometers is alcohol tinged with a red colour.

The values of 1° on the scales of Nos. 1, 2, 3 and 4, are respectively $2^{\text{in.}}$, $1^{\text{in.}}1$, $0^{\text{in.}}9$, and $0^{\text{in.}}55$; and the ranges of the scales, as first mounted, were, 43°·0 to 52°·7, 42°·0 to 56°·8, 39°·0 to 57°·5, and 34°·2 to 64°·5.

These ranges for Nos. 2, 3, and 4, were found to be insufficient in some years, particularly those of Nos. 3 and 4, or the thermometers sunk to the depth of 6 feet and 3 feet.

In 1857, June 22, Messrs. Negretti and Zambra removed from Nos. 3 and 4 a quantity of fluid corresponding to the extent of 5° on their scales, and the scales of these two thermometers were then lowered by that linear extent, making the readings the same as before. Their ranges are now, respectively, 44° to 62°·5, and 39°·2 to 69°·5.

In subsequent years it was found that the amount of fluid removed was somewhat too great, for now at the lower end of the scale the 6-foot thermometer sometimes falls below the limit of its scale or 44°; and the 3-foot thermometer below 39°·0; in which cases the alcohol sinks into the capillary tube.

The readings at the early part of the series were at times defective at high temperatures, but always complete at low temperatures; now, they are always complete at high temperatures, and are at times defective at low temperatures. The two combined, however, will enable us to complete all readings.

These thermometers are read once a day, at noon, and the readings appear in the printed volumes as read from their scales without correction.

§ 19. *Thermometers immersed in the Water of the Thames.*

The self-registering maximum and minimum thermometers for determining the highest and lowest temperatures of the water of the Thames are by Messrs. Negretti and Zambra, and are observed every day at 9^h a. m.

A strong wooden trunk is firmly fixed to the side of the Dreadnought Hospital Ship, about 5 feet in length, and closed at the bottom; the bottom and the sides, to the height of 3 feet, are perforated with a great number of holes, so that the water can easily flow through; the thermometers are suspended within this trunk so as to be about 2 feet below the surface of the water, and 1 foot from the bottom of the trunk.

The regular observations are made under the superintendence of the Medical Officers of the Ship.

The thermometer for maximum temperature was out of order on January 28, 31; February 1 to March 5, March 12 and 14, April 1 to 10, and 29 and 30; May 23, June 9, July 23, September 4, and December 28; that for minimum temperature was out of order on January 28, March 12 and 14, April 1 to 10, and 29 and 30; May 22 to 26; June 9; July 23 and 31; September 4 and 23; October 26 and 27; and December 28.

The index-error corrections to these thermometers were:—

For the maximum thermometer, till January 30,	subtract 1·0
from March 5 to December 31,	subtract 1·2
For the minimum thermometer, throughout the year,	subtract 0·3

§ 20. *Osler's Anemometer.*

This anemometer is self-registering: it was made by Newman, on a plan furnished by A. Follett Osler, Esq., F.R.S., but has received several changes since it was originally constructed. A large vane, which is turned by the wind, and from which a vertical spindle proceeds down nearly to the table in the north-western turret of the ancient part of the Observatory, gives motion by a pinion upon the spindle to a rack-work carrying a pencil. This pencil makes a mark upon a paper affixed to a board which is moved uniformly in a direction transverse to the direction of the rack-motion. The movement of the board is effected by means of a second rack connected with the pinion of a clock. The paper has lines printed upon it corresponding to the positions which the pencil must take when the direction of the vane is N., E., S., or W.; and also has transversal lines corresponding to the positions of the pencil at every hour. The first adjustment for azimuth was obtained by observing from a certain point the time of passage of a star behind the vane-shaft, and computing from that observation the azimuth; then on a calm day drawing the vane by a cord to that position, and adjusting the rack, &c., so that the pencil position on the sheet corresponded to that azimuth.

For measuring the pressure of the wind, the shaft of the vane, as arranged by Mr. Osler, carried a plate one foot square, which was supported by horizontal rods sliding into grooves, and was urged in opposition to the wind by three spiral springs, so arranged that only one came into play when the wind was light, and the others necessarily acted in conjunction with the first as the plate was driven further and further by the force of the wind. A cord from this plate passed over a pulley, and communicated with a copper wire passing through the center of the spindle, which at the bottom communicated with another cord passing under a pulley and held in tension by a slight spring: and by this a pencil was moved transversely to the direction in which the paper fixed to the board is carried by the clock. Lines were printed upon the paper corresponding to different values of the pressure; the intervals of these lines were adjusted by applying weights of 1 lb., 2 lbs., &c., to move the pressure-plate in the same manner as if the wind pressed it.

This construction was in use till the middle of 1866, when the following modifications were made in it by Mr. Browning:—

The vane-shaft was made to bear upon anti-friction-rollers running in a cup of oil. For elucidation of the following description of the apparatus which it carries, I refer to Figure 3 on the engraving at the end of this Introduction (for the use of which I am indebted to the Council of the Meteorological Society). To the vane-shaft is attached a rectangular frame C, which rotates with the vane. To this vane are firmly attached the ends of four strong springs D, which rise from the point of attachment in a vertical direction, are then bent so as to descend below the frame C, and are then bent upwards so as to rise a short distance, where they terminate, each of them thus forming a large hook. To the interior of each strong spring, near to its upper bend, is affixed a very weak spring, which descends free into the lower bend or hook of the strong spring, so that its lower end may be moved by a light pressure till it reaches and takes bearing against the bent-up part of the strong spring, after which it cannot be further moved without moving the strong spring, and will therefore require much greater pressure. The four ends of these four light springs carry the circular pressure-plate A by the following connexions. The two which are farthest from A, or which are below the wide part of the vane, are united by a light horizontal cross-bar G ; and from the ends of these springs proceed four light bars E, which are attached to points of the pressure-plate A, near its circumference. The two ends of light springs which are nearest to A are also united by a light horizontal cross bar, which is attached to a projection from the center of the plate A. (The diagonal lines upon A, in the diagram, represent indistinctly two strengthening edge-bars upon the pressure-plate, and the projection above-mentioned is fixed to their intersection.) The weight of the pressure-plate thus rests entirely on the slender springs ; it is held steadily in position, as regards the opposition to the wind, and it moves without sensible friction. A light wind drives it through a considerable space, until the ends of one pair of light springs touch their large hooks ; then for every additional pound of pressure the movement is smaller, till the ends of the other pair of light springs touch their large hooks ; after this the movement for every additional pound of pressure is still further diminished. This apparatus was arranged by Mr. Browning. The communication with the pencil below is similar to that in the first construction : the cord and pulley are omitted in the drawing to avoid confusion.

The pressure-pencil below is carried by a radial bar, whose length is parallel to the scale of hours ; it is brought to zero by a small weight on a cord running over a pulley.

The surface of the pressure-plate is 2 square feet, or double that in the old construction. The scale of indications on the recording-sheet was determined experimentally as in the old instrument ; yet it is remarked that the pressures of wind per square foot appear generally greater than formerly.

The scale for small pressures is much larger, and their indications much more certain than formerly. A pressure of an ounce per square foot is clearly shown.

The old vane was dismounted on July 23 : from that time to August 11 the direction and pressure of wind were taken from an anemometer, the property of C. O. F. Cator, Esq., which happened to be mounted at the Royal Observatory, assisted by occasional eye-observations and personal estimations. The new anemometer was mounted on August 11.

A rain gauge of peculiar construction is carried by this instrument, by which the fall of rain is registered with reference to the time of the fall. It is described in § 22.

A fresh sheet of paper is applied to this instrument every day at 22^h mean solar time.

§ 21. *Robinson's Anemometer.*

This anemometer as used at the beginning of the year is self-registering, (not continuously self-registering, but requiring to be read from time to time,) and was made by Messrs. Negretti and Zambra on the principles described by Dr. Robinson in the Transactions of the Royal Irish Academy, vol. xxii. It is furnished with four hemispherical cups [each being 3·75 inches in diameter], attached to the extremities of two arms at right angles to each other, and revolving in a horizontal plane by the excess of pressure of the wind on their concave over that on their convex surfaces.

In the instrument used to 1866, October 12, the distance between the centers of opposite cups is 13·45 inches, and their centers describe 42·24 inches in each revolution, indicating, according to the theory, a horizontal movement of the air of 126·72 inches for each revolution, and of one mile for 500 revolutions. The accuracy of this theory was verified by experiments made in 1860 (to be described immediately). The horizontal arms are connected with a vertical spindle, upon which is an endless screw, working in a toothed wheel connected with a train of wheels, furnished with indices capable of registering one mile and decimal multiples of a mile up to 1,000 miles. The instrument is read every day at $22^{\rm h}$.

In the year 1860, on July 3, 4, and 13, experiments were made in Greenwich Park to ascertain the correctness of the theory of Robinson's anemometer; the point to be verified being that the scale of the instrument, founded on the supposition that the horizontal motion of the air is about three times the space described by the centers of the cups, is correct.

A post about 5 feet high with a vertical spindle in the top was erected, and on this spindle turned a horizontal arm, carrying at the extremity of its longer portion Robinson's anemometer, and on its shorter portion a counterpoise. The distance from the vertical spindle of the post to the vertical axis of the anemometer was $17^{\rm ft.}\ 8^{\rm in.}\cdot 7$. The reading of the dial was taken, and then the arm was made to revolve in the horizontal plane 50 or 100 times, an attendant counting the number of revolutions, and the reading of the dial was again taken. In this manner 1,000 revolutions were made in the direction N.E.S.W.N., and 1,000 revolutions in the direction N.W.S.E.N. In some of the experiments the air was sensibly quiet, and in others there was a little wind; the result was,

For a movement of the instrument through one mile,

Beam revolving N.E.S.W. (opposite to the direction of rotation of the Anemometer-cups)	1·15 was registered.
Beam revolving N.W.S.E. (in the same direction as the Anemometer-cups)	0·97 was registered.

The results from rapid revolutions and from slow revolutions were sensibly the same.

This may be considered as confirming in a very high degree the accuracy of the theory.

In the latter part of the year a new instrument, adapted to give a continuous record of the velocity of the wind, was mounted by Mr. Browning, of which the principal parts are represented in Figures 1 and 2 of the engraving. The motion is given (as in the former) by the pressure of the air on four hemispherical cups, the distance of the center of each from the axis of rotation being 15·00 inches.

The foot of the axis is a hollow flat cone bearing upon a sharp cone which rises up from the base of a cup of oil. The communication of movement to wheel-work is essentially the same as in the former instrument; but a pinion C upon the axis of one of the wheels (which, in the figure, occupies a place too high) acts in a rack J, drawing it upwards by the ordinary motion of the revolving cups. The rack is pressed to the pinion by a spring, and, when it has been drawn up, it can be pressed by hand in opposition to the spring so as to release it from the pinion, and can then be pushed down, again to be raised by the action of the wheel-work. The rack is connected at the bottom with a sliding rod D, which passes down into the chamber below, where it draws up the sliding pencil-carrier E. The pencil F, which it carries, traces its indications upon the sheet of paper wrapped round a barrel, whose axis is vertical, and which by spindle connexion with the clock H is made to revolve in 24 hours. The revolving cups and wheel-work are so adjusted that a motion of the pencil upwards of one inch represents a motion of the air through 100 miles. The curve traced upon the barrel exhibits, therefore, the aggregate of the air's movements, and also the air's velocity, at every instant of the day. The instrument was finally brought into continuous use on 1866, October 12.

§ 22. *Rain Gauges.*

The rain-gauge connected with Osler's anemometer is 50 feet 8 inches above the ground, and 205 feet 6 inches above the mean level of the sea. It exposes to the rain an area of 200 square inches (its horizontal dimensions being 10 by 20 inches).

The collected water passes through a tube into a vessel suspended in a frame by spiral springs, which lengthen as the water increases, until 0·24 of an inch is collected in the receiver; it then discharges itself by means of the following modification of the syphon. A copper tube, open at both ends, is fixed in the receiver, in a vertical position, with its end projecting below the bottom. Over the top of this tube a larger tube, closed at the top, is placed loosely. The smaller tube thus forms the longer leg, and the larger tube the shorter leg, of a syphon. The water, having risen to the top of the smaller tube, gradually falls through it into the uppermost portion of a tumbling bucket, fixed in a globe under the receiver. When full, the bucket falls over, throwing the water into a small pipe at the lower part of the globe; the water completely fills the bore of the pipe; its descent causes an imperfect vacuum in the globe, sufficient to cause a draught in the longer leg of the syphon, and the whole contents run off. After leaving the globe, the water is carried away by a waste-pipe attached to the building. The springs then shorten and raise the receiver. The ascent and descent of the water-vessel move a radius-bar which carries a pencil; and this pencil makes a trace upon the paper carried by the sliding-board of the self-registering anemometer. As the trace is rather long in proportion to the length of the radius-bar, the bar has now been furnished by Mr. Browning with a "parallel motion," which makes the trace sensibly straight.

The scale of the printed paper was adjusted by repeatedly filling the water-vessel until it emptied itself, then weighing the water, and thus ascertaining its bulk, and dividing this bulk by the area of the surface of the rain receiver.

A second gauge, with an area 77 square inches nearly, is placed close to the preceding, the receiving surface of both being on the same horizontal plane.

A third gauge is placed on the roof of the Octagon room, at 38 feet 4½ inches above the ground, and 193 feet 2½ inches above the mean level of the sea. It is a simple cylinder gauge, 8 inches in diameter and about 50¼ inches in area. The height of the cylinder is 13½ inches; at the depth of 1 inch from the top within the cylinder is fixed a funnel (an inverted cone) of 6 inches perpendicular height; with the point of this funnel is connected a tube, ⅕ of an inch in diameter, and 1½ inch in length; ¾ of an inch of this tube is slightly curved, and the remaining ¾ of an inch is bent upwards, terminating in an aperture of ⅛ of an inch in diameter. By this arrangement, the last few drops of water remain in the bent part of the tube, and the water is some days evaporating. The upper part of the funnel or bore of the cone is connected with a brass ring, which has been turned in a lathe, and this is connected with a circular piece 6 inches in depth, which passes outside the cylinder, and rests in a water joint, attached to the inner cylinder, and extending all round.

A fourth gauge is placed on the top of the Library; it is a funnel, whose top has a diameter of 6 inches; its exposed area is 28¼ inches nearly. The receiving surface of the gauge is 22 feet 4 inches above the ground, and 177 feet 2 inches above the mean level of the sea.

A fifth gauge is planted on the roof of the Photographic Thermometer shed, 10 feet above the ground, and 164 feet 10 inches above the mean level of the sea. Its construction is the same as that of the third gauge.

A sixth gauge is a self-registering rain-gauge on Crosley's construction, made by Watkins and Hill. The surface exposed to the rain is 100 square inches. The collected water falls into a vibrating bucket, whose receiving concavity is entirely above the center of motion, and which is divided into two equal parts by a partition whose plane passes through the axis of motion. The pipe from the rain-receiver terminates immediately above the axis. Thus that part of the concavity which is highest is always in the position for receiving water from the pipe. When a certain quantity of water has fallen into it, it preponderates, and, falling, discharges its water into a cistern below; then the other part of the concavity receives the rain, and after a time preponderates. Thus the bucket is kept in a state of vibration. To its axis is attached an anchor with pallets, which acts upon a toothed wheel by a process exactly the reverse of that of a clock-escapement. This wheel communicates motion to a train of wheels, each of which carries a hand upon a dial-plate; and thus inches, tenths, and hundredths are registered. Sometimes, when the escapement has obviously failed, the water which has descended to the lower cistern has again been passed through the gauge, in order to enable an assistant to observe the indication of the dial-plates without fear of an imperfection in the machinery escaping notice. The gauge is placed on the ground, 21 feet South of the Magnetic Observatory, and 156 feet 6 inches above the mean level of the sea.

The seventh and eighth gauges are placed near together, about 16 feet south of the Magnetic Observatory, 5 inches above the ground, and 155 feet 3 inches above the mean level of the sea. They are similar in construction and area to No. 3. These cylinders are sunk about 8 inches in the ground.

All these gauges, except No. 7, are read at 22^h daily; in addition, Crosley's gauge and No. 8 are read daily at 9^h p.m., and No. 7 at the end of each month only, to check the summation of the daily readings of No. 8. All are read at midnight of the last day of each month.

Gauges Nos. 1, 2, 3, 5, 8 were made by Messrs. Negretti and Zambra; No. 4 by Troughton; No. 6 by Watkins and Hill; and No. 7 is an old gauge.

§ 23. *The Actinometer.*

The actinometer consists of a hollow cylinder of glass 7 inches in length, and 1·22 inch in diameter, united at one end to a tube similar to a thermometer tube, 7 inches in length, which is terminated at its upper end by a ball 1·1 inch in diameter, the upper part of which is drawn out to a point, and broken off, so as to leave the end open, merely stopped by wax, and covered by a brass cap. The other end of the cylinder is closed by a silver plated cap, cemented on it, and furnished with a screw of silver, with 16 threads to an inch, passing through a collar of waxed leather. The axis of this screw is perforated through its entire length, to allow the stem of a thermometer to pass through it, (the bulb of which is nearly central within the cylinder), for the purpose of determining the temperature of the inclosed liquid. This liquid is of a deep blue colour (ammonio-sulphate of copper). When the actinometer is used in observation, the ball at the top is left full of air, and, according to the position of the screw, the liquid mounts into the first-mentioned tube, and its elevation can be read off on an attached scale which is divided into 100 parts. The cylinder is enclosed in a chamber which is blackened on three sides, and is covered on the fourth side or front by plate glass, to defend the chamber from currents of air; this glass is removeable at pleasure. The screw is used to diminish or increase the capacity of the cylindrical cistern, and thus to drive into the ball, which acts as a reservoir, all air out of the tube, and then to draw back from the reservoir such a quantity as shall leave the top of the liquid at the zero of the scale or elsewhere at pleasure, leaving no bubble of air in the cylinder, and no blebs of liquid in the tube.

For using the instrument a wooden table is prepared, with a moveable part, on which the instrument is placed, and on which it can very readily be exposed perpendicularly to the rays of the Sun; and where a screen can momentarily be placed so as to cut off all the rays of the Sun from the chamber of the instrument, and can be quickly withdrawn, so as fully to expose the cylindrical chamber to the Sun's radiation.

The method of observation is as follows:

The liquid being adjusted to zero of the scale by the screw, will mount into the stem, as soon as exposed to the Sun. It is allowed to do so for a minute or two, taking care, by the use of the screw, that it does not mount into the ball. When all is ready for observation, the liquid is drawn down to the zero of the scale, slowly and steadily, the thermometer is read for the temperature of the liquid, at the beginning of a minute the scale is read, and at the end of a minute it is read again: the screen is placed before the instrument: at the following 30^s the scale is read for the first shade-observation, and at one minute afterwards is again read for the second shade-observation; the instrument is then exposed to the Sun at the beginning of the next minute, and read as before: and so on successively.

A delicate blackened bulb thermometer for solar radiation has also been frequently read during each series of experiments, for collection of comparative observation of the two instruments.

It is found by experiment that the fluid is driven up the tube 100 divisions by one-tenth of a turn of the screw. One inch in length of the screw including 16 threads, the distance between two contiguous threads is therefore 0·0625 inch.

A fine piece of silk was carefully passed round the bottom of 18 threads; its length was found to be 25·2 inches. Therefore the circumference of the screw at the bottom of the thread was 1·4 inch and its diameter 0·445 inch nearly. The depth of the thread is fully 0·05 inch.

These measures will give the means of converting the observed readings of the liquid in the slender tube into actual expressions of the proportion to the general store of liquid in the cylindrical chamber.

§ 24. *Electrical Apparatus.*

The electrical apparatus consists of two parts, namely, the Moveable Apparatus, which is connected with a pole nearly 80 feet high planted 7 feet North and 2 feet East of the north-east angle of the north arm of the Magnetic Observatory (as extended in 1862); and the Fixed Apparatus, which is mounted in a projecting window in the ante-room of the Magnetic Observatory.

On the top of the pole is fixed a projecting cap, to which are fastened the ends of two iron rods, which terminate in a pit sunk in the ground, and are kept in tension by attached weights. These rods are to guide the moveable apparatus in its ascents and descents. Near the bottom of the pole is fixed a windlass; the rope upon which it acts passes over a pulley in the cap, and is used to raise the moveable apparatus, which when raised to the top is suspended on a hook.

The moveable apparatus consists of the following parts:—A plank in a nearly vertical position is attached to perforated iron bars, which slide upon the iron rods. On the upper part of this plank is a cubical box. The box incloses a stout pillar of glass, having a conical hollow in its lower part. In the bottom of the box there is a large hole through which a cone of copper passes into the conical hollow of the glass pillar. In the lower part of the box a gas-lamp is placed, by the flame of which the copper cone and the lower part of the glass pillar are kept in a state of warmth. A copper wire is fastened round the glass pillar; its end is carried to a similar glass pillar, warmed in the same manner, near the north-western turret of the Octagon room; by this wire, whose length is about 400 feet, the atmospheric electricity is collected. To this wire, near the box, is attached another copper wire now covered with gutta percha 0·1 inch in diameter, and about 73 feet long, at the end of which is a hook; a loaded brass lever connected with the fixed apparatus presses upon this hook, and thus keeps the wire in a state of tension, and at the same time establishes the electrical communication between the long horizontal wire and the fixed apparatus.

The fixed apparatus consists of these parts:—A glass bar, nearly 3 feet long, and thickest at its middle, is supported in a horizontal position, its ends being fixed in pieces of wood projecting downwards from the roof of the projecting window. Near to each end is placed a small gas-lamp, whose chimney encircles the glass, and whose heat keeps the glass in a state of warmth proper for insulation. A brass collar surrounds the center of the glass bar; it carries one brass rod, projecting vertically upwards through a hole in the roof of the window-recess, to which rod are attached a small metallic umbrella and the loaded lever above-mentioned; and it carries another rod projecting vertically downwards, to which is attached a horizontal brass tube in an East and West direction. On the North and South sides of this tube there project four horizontal rods, through the ends of which there pass vertical rods, which can be fixed by screws at any elevation; these are placed in connexion with the electrometers, which rest on the window seat.

The electrometers during the year 1866 consisted of a Double Gold Leaf Electrometer of the ordinary construction; two Volta's Electrometers, denoted by Nos. 1 and 2; a Henley's Electrometer; a Ronalds' Spark Measurer; a Dry-pile Apparatus; and a Galvanometer.

Volta 1 and Volta 2 are of the same construction; each is furnished with a pair of straws 2 Paris inches in length; those of the latter being much heavier than those of the former: each instrument is furnished with a graduated ivory scale, whose radius is 2 Paris inches, and it is graduated into half Paris lines. In the original construction of these instruments it was intended that each division of No. 2 should correspond to five of No. 1: the actual relation between them has not yet been determined by observations at the Royal Observatory. The straws are suspended by hooks of fine copper wire to the suspension-piece, and they are separated by an interval of half a line.

Henley's Electrometer is supported on the West end of the large horizontal tube by means of a vertical rod fixed in it. On each side of the upper part of this rod is affixed a semicircular plate of ivory, whose circumference is graduated; at the centers of these ivory plates two pieces of brass are fixed, which are drilled to receive fine steel pivots, carrying a brass axis, into which the index or pendulum is inserted; the pendulum terminates with a pith ball. The relation between the graduations of this instrument and those of the other electrometers has not been determined. This instrument has seldom been affected till Volta 2 has risen to above 100 divisions of its scale.

The spark measurer consists of a vertical sliding rod terminated by a brass ball, which ball can be brought into contact with one of the vertical rods before referred to, also terminating in a ball; and it can be moved from it or towards it by means of a lever, with a wooden handle. During the operation of separating the balls, an index runs along a graduated scale, and exhibits the distance between the balls, and this distance measures the length of the spark.

The electrometers and the spark measurer were originally constructed under the superintendence of Francis Ronalds, Esq., but have since received small alterations.

The dry-pile apparatus was made by Watkins and Hill; it is placed in connexion with the brass bar by a system of wires and brass rods. The indicator, which vibrates between the two poles, is a small piece of gold leaf. This instrument is very delicate, and it indicates at once the quality of the electricity. When the inclination of the gold leaf is such that it is directed towards the top of either pile, it remains there as long as the quantity of electricity continues the same or becomes greater: the position is sometimes expressed in the notes by the words "as far as possible." The angle which the gold leaf makes with the vertical at this time is about 40°.

The galvanometer was made by Gourjon of Paris, and consists of an astatic needle, composed of two large sewing needles, suspended by a split silk fibre, one of the needles of the pair vibrating within a ring formed by 2,400 coils of fine copper wire. The connexions of the two portions of wire forming these 2,400 coils are so arranged that it is possible to use a single system of 1,200 coils of single wire, or a system of 1,200 coils of double wire, or a system of 2,400 coils of single wire: in practice the last has always been used. A small ball communicating by a wire with one end of the coils is placed in contact at pleasure with the electric conductor, and a wire leading from the other end of the coil communicates with the earth. An adjustible circular card, graduated to degrees, is placed immediately below the upper needle; the numeration of its divisions proceeds in both directions from a zero. One of these directions is distinguished by the letter A, and the other by the letter B; and the nature of the indication represented by the deflection of the needle towards A or towards B will be ascertained from the following experiment. A voltaic battery being formed by means of a silver coin and a copper coin, having a piece of blotting paper moistened with saliva between them: when the copper touches the small ball, and the wire which usually communicates with the earth is made to touch the silver, the needle turns towards A; when the silver touches the small ball, and the wire is made to touch the copper, the needle turns towards B.

§ 25. *Explanation of the Tables of Meteorological Observations.*

The mean daily value of the difference between dew-point temperature and air-temperature is the difference between the two numbers in the sixth and seventh columns. The Greatest and Least are the greatest and least among the differences corresponding to the times of observation in the civil day, or they are found from the absolute maxima and minima, as determined by comparing the observations of the self-registering wet-bulb thermometers with those of the self-registering dry-bulb thermometers.

The difference between the mean temperature for the day and the mean for the same day of the year on an average of fifty years, is found by comparison with a table of results deduced by Mr. Glaisher from fifty years' observations, made at the Royal Observatory, ending 1863.

Little explanation of the results deduced from Osler's Anemometer appears to be necessary. It may be understood generally that the greatest pressure occurred in gusts of short duration.

Robinson's Anemometer is read off every day at 22^h (10^h A.M.) and the difference between consecutive readings is entered opposite to the civil day on which the first reading is taken.

The register of rain ends generally at 9^h P.M.; the amounts recorded at 10^h A.M. and at 9^h P.M. being added together to form the rain fall for the day. This applies to the Cylinder Rain-gauge partly sunk in the ground, described above as the "eighth." If, however, there appears to be any doubt as to the correctness of the results, reference is made to a Rain-gauge of similar construction and placed near to it, called above the "seventh."

For understanding the divisions of time under the heads of Electricity and Weather, the following remarks are necessary:—The day is divided by columns into two parts (from midnight to noon, and from noon to midnight), and each of these parts is roughly subdivided into two or three parts by colons (:). Thus, when there is a single colon in the first column, it denotes that the remarks before it apply (roughly) to the interval from midnight to 6 A.M., and those following it to the interval from 6 A.M. to noon. When there are two colons in the first column, it is to be understood that the twelve hours are divided into three nearly equal parts of four hours each. And similarly for the second column.

The following is the explanation of the notation employed for record of electrical observations, it being premised that the quality of the Electricity is always to be supposed positive when no indication of quality is given:—

g cur.	denotes	*galvanic currents*	s	denotes	*strong*
m	...	*moderate*	sp	...	*sparks*
N	...	*negative*	v	...	*variable*
P	...	*positive*	w	...	*weak*

The duplication of the letter denotes an intensity of the modification described thus, s s is very strong; v v, very variable.

The Clouds and Weather are described generally by Howard's Nomenclature; the figure denotes the proportion of sky covered by clouds, the whole sky being represented by 10. The notation is as follows:

a	denotes	*aurora borealis*	r	denotes	*rain*
ci	...	*cirrus*	th-r	...	*thin rain*
ci-cu	...	*cirro-cumulus*	oc-r	...	*occasional rain*
ci-s	...	*cirro-stratus*	fr-r	...	*frozen rain*
cu	...	*cumulus*	h-r	...	*heavy rain*
cu-s	...	*cumulo-stratus*	shs-r	...	*showers of rain*
d	...	*dew*	c-r	...	*continued rain*
h-d	...	*heavy dew*	c-h-r	...	*continued heavy rain*
f	...	*fog*	m-r	...	*misty rain*
sl-f	...	*slight fog*	fr-m-r	...	*frequent misty rain*
th-f	...	*thick fog*	sl-r	...	*slight rain*
fr	...	*frost*	h-shs	...	*heavy showers*
glm	...	*gloom*	fr-shs	...	*frequent showers*
gt-glm	..	*great gloom*	fr-h-shs	...	*frequent heavy showers*
h-fr	...	*hoar frost*	li-shs	...	*light showers*
h	...	*haze*	oc-shs	...	*occasional showers*
hl	...	*hail*	oc-h-shs	...	*occasional heavy showers*
so-ha	...	*solar halo*	sq	...	*squall*
l	...	*lightning*	sqs	...	*squalls*
li-cl	...	*light clouds*	fr-sqs	...	*frequent squalls*
lu-co	...	*lunar corona*	h-sqs	...	*heavy squalls*
lu-ha	...	*lunar halo*	fr-h-sqs	...	*frequent heavy squalls*
m	...	*meteor*	sc	...	*scud*
ms	...	*meteors*	li-sc	...	*light scud*
n	...	*nimbus*	sl	...	*sleet*

sn	denotes	*snow*	th-cl	denotes	*thin clouds*
oc-sn	...	*occasional snow*	v	...	*variable*
sl-sn	...	*slight snow*	vv	...	*very variable*
s	...	*stratus*	w	...	*wind*
t	...	*thunder*	st-w	...	*strong wind*
t-s	...	*thunder storm*			

The foot-notes show the means and extremes of readings, and their departure in each month from average values, as found from the preceding Twenty-five Years' Observations; those relating to Humidity have been calculated from the Fourth Edition of Glaisher's Hygrometrical Tables.

The observations with the Actinometer are sufficiently explained in the description of the instrument in § 23.

§ 26. *Observations of Luminous Meteors.*

In arranging for the observations of meteors, the directions circulated by the Committee of the British Association have received the most careful attention. The observers have been educated in the knowledge of the principal stars by observations of the stars themselves, and by means of globes and maps. The general instruction to all observers has been, to look out for meteors on every clear night; but the observer specially appointed for the evening's duties has been more particularly charged with this observation.

On the nights specially mentioned in the directions of the British Association Committee, greater attention was given to the sky, and the observations of meteors were made more systematically. The principal nights are, January 2 and 10; February 6; March 1; April 19; May 18; June 6 and 20; July 17, 20, and 29; August 3, August 7–13; September 10; October 1 and 23; November 9–14, November 19, 28, and 30; December 8–14, especially December 11. A more extended list of days has been published by the British Association Committee.

Special arrangements were made in the August period for observing till the morning; and in the November period for observing through the night, one or two observers being on duty till midnight, and then all the observers till daybreak. The observers were so stationed as to command different views of the sky, to secure observation of all the meteors which might present themselves, and to guard against the observation of the same meteor by different observers. The tracks of nearly 300 meteors were recorded, and nearly 9000 meteors were counted on the morning of 1866, November 14; of these, nearly 5000 were counted between the hours of 1 and 2.

The observers in the year 1866 were Mr. Nash, Mr. Harding, Mr. Trapaud, Mr. Jones, Mr. Wright, Mr. Farncomb, and Mr. Stevenson.. Their observations are distinguished by the initials N., H., T., J., W., F., and S., respectively.

§ 27. *Details of the Chemical Operations for the Photographic Records.*

Mr. Glaisher has drawn up the following account of the Chemical Processes employed in the Photographic Operations for the self-registration of the Magnetical and Meteorological Indications.

CHEMICAL PREPARATION AND TREATMENT OF THE PHOTOGRAPHIC PAPER FOR PRIMARIES.

The paper used is similar to that made by Whatman; it is made by his successor Hollingsworth; it is strong and of even texture, and is prepared expressly for Photographic purposes.

First Operation.—Preliminary Preparation of the Paper.

The chemical solutions used in this process are the following:—

(1.) Sixteen grains of Iodide of Potassium are dissolved in one ounce of distilled water.

(2.) Twenty-four grains of Bromide of Potassium are dissolved in one ounce of distilled water.

(3.) When the crystals are dissolved, the two solutions are mixed together, forming the iodising solution. The mixture will keep through any length of time. Immediately before use, it is filtered through filtering paper.

A quantity of the paper, sufficient for the consumption of several weeks, is treated in the following manner, sheet after sheet.

> The sheet of paper is pinned by its four corners to a horizontal board. Upon the paper, a sufficient quantity (about 50 minims, or $\frac{5}{48}$ of an ounce troy) of the iodising solution is applied, by pouring it upon the paper in front of a glass rod, which is then moved to and fro till the whole surface is uniformly wetted by the solution. Or, the solution may be evenly distributed by means of a camel-hair brush.

The paper thus prepared is allowed to remain in a horizontal position for a few minutes, and is then hung up to dry in the air; when dry, it is placed in a drawer, and may be kept through any length of time.

Second Operation.—Rendering the Paper sensitive to the Action of Light.

A solution of Nitrate of Silver is prepared by dissolving 50 grains of crystallized Nitrate of Silver in one ounce of distilled water. Since the magnetic basement has been used for photography, 15 grains of Acetic Acid have always been added to the solution.

Then the following operation is performed in a room illuminated by yellow light.

> The paper is pinned as before upon a board somewhat smaller than itself, and (by means of a glass rod, as before,) its surface is wetted with 50 minims of

the Nitrate of Silver solution. It is allowed to remain a short time in a horizontal position, and, if any part of the paper still shines from the presence of a part of the solution unabsorbed into its texture, the superfluous fluid is taken off by the application of blotting paper.

The paper, still damp, is immediately placed upon the interior cylinder, and is covered by the exterior glass cylinder, and the united cylinders are mounted upon the revolving apparatus, to receive the spot of light formed by the mirror, which is carried by the magnet; or to receive the line of light passing through the thermometer tube.

Third Operation.—Development of the Photographic Trace.

When the paper is removed from the cylinder, it is placed as before upon a board, and a saturated solution of Gallic Acid, to which a few drops of Aceto-Nitrate of Silver are occasionally added, is spread over the paper by means of a glass rod, and this action is continued until the trace is fully developed. The solutions are kept in the magnetic basement, and are always used at the temperature of that room. When the trace is well developed, the paper is placed in a vessel with water, and repeatedly washed with several waters; a brush being passed lightly over both sides of the paper to remove any crystalline deposit.

Fourth Operation.—Fixing the Photographic Trace.

The Photograph is placed in a solution of Hyposulphite of Soda, made by dissolving four or five ounces of the Hyposulphite in a pint of water; it is plunged completely in the liquid, and allowed to remain from one to two hours, until the yellow tint of the Iodide of Silver is removed. After this the sheet is washed repeatedly with water, allowed to remain immersed in water for 24 hours, and afterwards placed within folds of cotton cloths till nearly dry. Finally it is placed between sheets of blotting-paper, and is pressed.

CHEMICAL PREPARATION AND TREATMENT OF THE PHOTOGRAPHIC PAPER FOR SECONDARIES.

Before taking a Secondary, the Primary is examined to ascertain whether the tint of the photographic curve is sufficiently dark. If it is not, the Primary is laid, face downwards, upon a desk of transparent plate-glass, below which is a large silvered plane mirror, so placed that the light from the sky is reflected upwards through the transparent glass and through the Primary; and the photographic curve is seen from the upper side or back with perfect distinctness. An assistant then darkens the back of the photographic curve by the application of sepia; the original photograph being untouched.

The paper used for the Secondaries is made by Rive; it is a strong wove paper, of tolerably even texture, thin, but able to bear a great deal of wear.

First Operation.—Preliminary Preparation of the Paper.

The chemical solution required for this purpose is as follows:—

Two grains of Chloride of Ammonium are dissolved in one ounce of distilled water. A sufficient quantity of this solution is placed in a flat-bottomed porcelain dish, and sheets of paper, one by one, are plunged within it; care being taken that no air bubbles remain between the paper and the solution; this may be prevented by slight pressure over the sheet by means of a bent glass rod. When a few sheets are thus immersed, they are turned over, and are taken out and hung to dry. Any number of sheets may thus be prepared.

An equally good result is obtained, by spreading over one side by means of a glass rod, as in the preparation of the Primaries, a solution of Chloride of Ammonium made by dissolving five grains of the chloride in one ounce of distilled water.

Second Operation.—Rendering the Paper sensitive to the Action of Light.

The solution required for this purpose is as follows:—

To a filtered solution of Nitrate of Silver (made by dissolving 50 grains of Crystallized Nitrate of Silver in one ounce of distilled water) some strong solution of Ammonia is added; the whole becomes at first of a dark brown colour, but when a sufficient quantity of Ammonia is added the solution becomes perfectly clear; a few crystals of Nitrate of Silver are then added till the solution is a little dull, forming "Ammoniacal Nitrate of Silver"; it is then ready for use.

The following operation is performed in a room illuminated by yellow light:—

By means of a glass rod this solution is spread over the paper, whilst pinned on a board; the paper is dried before a fire, and is then in a fit state to be used for producing a Secondary.

Third Operation.—Formation of the Photographic Copy.

A sheet of the paper so prepared is placed in a printing frame with its prepared side upwards, upon a bed of blotting paper resting upon a sheet of plate-glass; the Primary is then placed on the paper with its own face downwards; and as it is necessary, for obtaining a correct copy of the Primary, that it should be in close contact with the prepared surface, a second sheet of plate-glass is placed over it, and the two are pressed together by clamps and screws. The whole is then exposed to the light (the Primary to be copied being above the paper on which the copy is to be made). The time required to produce a copy depends, in a great measure, upon the thickness of the paper on which the Primary is made, and on the actinic quality of the light; a period of five minutes in a bright sunshine, or one hour in clear daylight, is generally sufficient.

Fourth Operation.—Fixing the Photographic Secondary.

When an impression has been thus obtained, it is necessary that the undecomposed Salts of Silver remaining in the paper be removed.

For this purpose the Secondary is at once plunged into water and well washed on both sides, passing a camel-hair brush over every part of it; it is then plunged into a solution of Hyposulphite of Soda (made by dissolving two or three ounces of the Hyposulphite in a pint of water), and is left through a period varying from half an hour to an hour. It is then removed, and washed in plain water several times; and running water is allowed to pass over it for twenty-four hours.

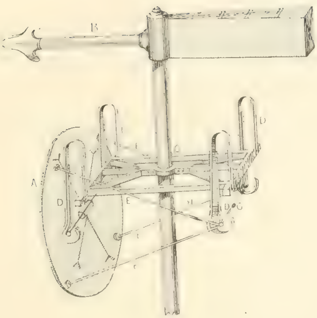
The sheets are then placed within the folds of drying cloths, till nearly dry, and finally between sheets of blotting paper.

The process of obtaining a Tertiary from a Secondary is in every respect the same as that of obtaining a Secondary from a Primary.

§ 28. *Personal Establishment.*

The personal establishment during the year 1866 has consisted of James Glaisher, Esq., F.R.S., Superintendent of the Magnetical and Meteorological Department, and Mr. William Carpenter Nash, Assistant.

Three or four computers have usually been attached to the Department.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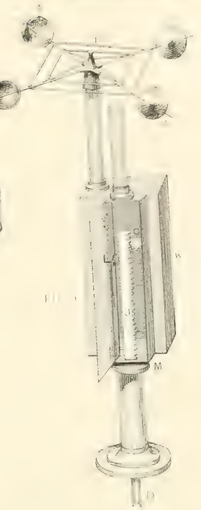
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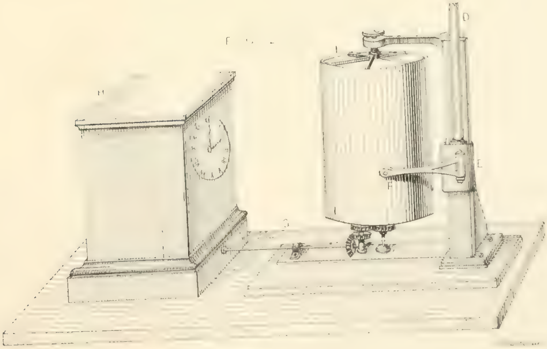
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F
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ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL OBSERVATIONS.

1866.

ROYAL OBSERVATORY, GREENWICH.

INDICATIONS

OF

MAGNETOMETERS.

1866.

Greenwich Mean Solar Time.	Western Declination.
Jan. 1	
h m	° ′ ″
0. 0	20. 33. 10
0. 15	33. 30
0. 27	33. 50
0. 42	34. 50
1. 12	34. 30
1. 24	33. 55
1. 42	33. 55
2. 5	33. 55
4. 25	31. 50
4. 57	32. 20
5. 53	31. 25
6. 9	32. 15
6. 29	31. 40
6. 53	29. 40
7. 25	31. 40
7. 30	31. 10
7. 41	31. 30
7. 55	29. 30
8. 8	29. 0
8. 18	29. 25
8. 29	30. 55
9. 25	30. 50
9. 39	30. 15
9. 57	30. 35
10. 25	30. 25
10. 36	31. 10
10. 47	25. 0
11. 6	23. 20
11. 18	22. 30
11. 35	24. 0
11. 56	21. 10
12. 25	26. 20
12. 44	27. 40
13. 15	28. 5
13. 40	30. 25
14. 0	30. 45
14. 30	29. 15
14. 56	29. 30
15. 10	30. 45
16. 5	31. 35
16. 23	33. 30
16. 47	31. 40
16. 55	32. 0
17. 24	31. 0
18. 42	31. 35
18 55	31. 0
20. 31	30. 25
21. 5	30. 25
21. 12	32. 40
21. 55	32. 10
23. 2	32. 40
23. 39	34. 25
23. 43	34. 20
23. 59	34. 35
Jan. 2	
0. 0	20. 34. 35
0. 59	35. 15

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Jan. 1	
h m	
	(†)
0. 50	·1376
1. 12	·1372
1. 41	·1382
1. 49	·1380
2. 5	·1384
4. 42	·1386
4. 57	·1384
6. 20	·1382
6. 44	·1372
7. 27	·1380
7. 55	·1369
8. 33	·1379
8. 44	·1378
9. 12	·1379
9. 25	·1376
9. 36	·1379
10. 10	·1372
10. 28	·1372
11. 0	·1390
11. 39	·1380
11. 41	·1382
12. 22	·1376
13. 6	·1372
13. 25	·1374
13. 42	·1373
13. 57	·1376
14. 45	·1374
15. 27	·1378
15. 42	·1375
16. 2	·1378
16. 30	·1377
16. 41	·1380
17. 6	·1379
17. 35	·1384
18. 10	·1379
20. 22	·1381
21. 7	·1378
21. 26	·1370
22. 9	·1372
23. 59	·1370
Jan. 2	
0. 0	·1370
0. 20	·1372

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Jan. 1	
h m	
0. 0	·03652
0. 45	·03658
2. 11	·03683
6. 34	·03677
7. 18	·03684
7. 54	·03680
8. 25	·03686
10. 41	·03677
11. 4	·03662
12. 19	·03657
15. 24	·03677
21. 11	·03657 ·03504
23. 59	·03512
Jan. 2	
0. 0	·03512
0. 55	·03517

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 1		
h m	°	°
1. 0	58 ·9	59 ·2
3. 0	58 ·9	59 ·2
9. 0	58 ·8	59 ·0
21. 0	58 ·7	58 ·6
Jan. 2		
1. 0	59 ·3	59 ·5
3. 0	59 ·6	60 ·0

Greenwich Mean Solar Time.	Western Declination.
Jan. 2	
h m	° ′ ″
1. 55	20. 37. 40
3. 6	35. 30
3. 19	35. 50
3. 45	34. 55
4. 6	33. 25
4. 11	33. 55
4. 24	33. 30
4. 36	34. 25
5. 11	34. 15
5. 28	35. 45
5. 43	34. 20
5. 53	34. 30
6. 8	33. 50
6. 31	35. 25
6. 38	35. 10
6. 40	29. 15
6. 50	32. 5
6. 57	28. 10
7. 9	31. 15
7. 15	30. 30
7. 23	30. 50
7. 40	33. 30
7. 42	33. 30
7. 50	35. 20
8. 6	33. 55
8. 15	34. 50
8. 25	29. 0
8. 33	27. 0
8. 40	28. 30
8. 50	26. 30
9. 4	25. 10
9. 16	29. 20
9. 23	29. 30
9. 27	30. 0
9. 34	27. 30
9. 41	27. 50
9. 51	26. 30
9. 57	27. 5
10. 19	24. 20
10. 27	26. 30
10. 38	25. 0
10. 51	21. 40
10. 58	21. 40
11. 16	14. 0
11. 28	11. 20
11. 42	14. 35
11. 48	13. 55
11. 59	16. 20
12. 39	21. 20
12. 59	14. 50
13. 16	25. 50
13. 28	29. 15
13. 31	29. 35
13. 41	35. 20
13. 56	30. 20
14. 9	29. 5
14. 23	30. 40
14. 33	30. 50

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Jan. 2	
h m	
1. 26	·1378
2. 0	·1363
3. 20	·1371
3. 56	·1367
4. 11	·1368
4. 13	·1367
4. 29	·1369
4. 53	·1367
5. 19	·1371
5. 31	·1368
6. 23	·1372
6. 34	·1368
6. 42	·1384
6. 49	·1381
7. 0	·1386
7. 11	·1377
7. 22	·1369
7. 41	·1369
7. 53	·1372
7. 56	·1376
8. 11	·1362
8. 21	·1346
8. 28	·1350
8. 42	·1352
8. 50	·1346
9. 3	·1362
9. 27	·1356
9. 41	·1362
10. 12	·1348
10. 21	·1350
10. 26	·1349
10. 36	·1352
10. 44	·1345
10. 57	·1342
11. 10	·1346
11. 25	·1334
11. 44	·1364
12. 0	·1341
12. 11	·1344
12. 28	·1334
12. 50	·1321
13. 6	·1314
13. 12	·1317
13. 23	·1312
13. 56	·1342
14. 24	·1343
14. 49	·1348
15. 11	·1348
15. 22	·1353
15. 27	·1348
15. 39	·1354
15. 45	·1351
16. 57	·1358
17. 5	·1352
17. 11	·1358
17. 18	·1354
17. 49	·1364
19. 6	·1360

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Jan. 2	
h m	
4. 10	·03557
6. 56	·03554
7. 53	·03570
7. 57	·03566
8. 12	·03584
8. 18	·03580
8. 44	·03637
9. 5	·03644
10. 29	·03598
11. 22	·03543
11. 32	·03567
11. 53	·03525
12. 43	·03540
12. 56	·03523
13. 12	·03550
13. 41	·03547
14. 3	·03505
16. 11	·03597
22. 13	·03620
23. 59	·03644

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 2		
h m	°	°
9. 0	59 ·8	60 ·0
21. 0	60 ·4	61 ·0
22. 0	60 ·1	61 ·0
23. 0	60 ·1	61 ·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 2		Jan. 2						
h m	° ′ ″	h m		h m		h m	°	°
14. 53	20. 33. 45	19. 25	·1366					
15. 9	32. 45	19. 42	·1362					
15. 23	33. 50	21. 14	·1356					
15. 28	32. 30	21. 33	·1358					
15. 36	32. 45	21. 41	·1352					
15. 45	31. 40	21. 44	·1357					
16. 15	34. 0	21. 55	·1354					
16. 22	33. 55	22. 6	·1360					
16. 29	33. 10	22. 12	·1353					
16. 38	34. 20	22. 19	·1356					
16. 53	33. 30	22. 41	·1349					
16. 57	34. 15	22. 44	·1352					
17. 7	31. 50	23. 12	·1336					
17. 11	34. 15	23. 55	·1356					
17. 21	32. 30	23. 59	·1354					
17. 26	32. 0							
17. 58	35. 0							
18. 10	35. 30							
	***							
18. 38	34. 20							
18. 42	35. 10							
	***							
19. 0	33. 30							
19. 11	34. 25							
	***							
19. 57	33. 10							
	***							
20. 39	31. 30							
21. 11	31. 50							
21. 25	31. 30							
21. 34	33. 10							
21. 41	31. 50							
21. 51	33. 0							
21. 56	32. 25							
22. 6	34. 45							
22. 12	33. 40							
22. 26	34. 30							
22. 34	33. 50							
22. 43	34. 55							
22. 53	34. 30							
23. 9	38. 5							
23. 12	36. 50							
23. 26	35. 40							
23. 33	36. 20							
23. 49	33. 30							
23. 55	34. 25							
23. 59	33. 55							
Jan. 3		Jan. 3		Jan. 3		Jan. 3		
0. 0	20. 33. 55	0. 0	·1354	0. 0	·03644	0. 0	60·4	61·0
0. 10	34. 15	0. 11	·1352	3. 42	·03724	1. 0	60·6	61·0
0. 16	33. 10	0. 13	·1361	4. 14	·03703	2. 0	60·8	62·0
0. 19	34. 40	0. 35	·1350	12. 35	·03633	3. 0	61·1	62·0
0. 23	33. 15	0. 45	·1354	13. 22	·03616	9. 0	60·6	62·0
0. 39	36. 0	0. 54	·1358	16. 25	·03614	21. 0	59·1	59·4
	***	0. 55	·1356	20. 0	·03592	22. 0	59·0	59·1
1. 39	33. 50	1. 41	·1364	23. 59	·03543	23. 0	59·0	59·1
1. 47	34. 50	1. 50	·1358					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 3		Jan. 3						
h m	° ′ ″	h m		h m		h m	°	°
2. 9	20. 33. 30	1. 56	·1362					
2. 15	34. 35	2. 12	·1354					
2. 24	34. 20	2. 36	·1342					
2. 33	34. 40	2. 41	·1346					
2. 39	34. 40	2. 43	·1342					
2. 43	33. 40	3. 5	·1348					
2. 54	34. 35	3. 25	·1344					
3. 1	32. 55	3. 55	·1362					
3. 12	31. 20	4. 24	·1358					
3. 27	30. 55	4. 41	·1362					
3. 41	38. 35	5. 0	·1354					
4. 3	32. 20	5. 39	·1351					
4. 12	32. 40	5. 53	·1356					
4. 24	31. 10	6. 11	·1349					
4. 27	31. 0	6. 42	·1359					
4. 39	31. 50	6. 56	·1354					
4. 41	31. 35	7. 11	·1358					
5. 17	33. 40	7. 26	·1354					
5. 24	32. 50	7. 44	·1358					
5. 38	32. 25	8. 11	·1355					
5. 42	31. 50	8. 20	·1356					
5. 55	33. 15	8. 31	·1356					
6. 6	32. 40	9. 37	·1360					
6. 24	30. 20	10. 3	·1358					
6. 53	32. 15	11. 34	·1360					
7. 10	30. 5	11. 52	·1355					
7. 24	30. 40	12. 12	·1360					
8. 0	32. 20	12. 27	·1356					
8. 9	32. 0	13. 10	·1363					
8. 35	32. 30	13. 41	·1357					
8. 49	31. 40	14. 9	·1356					
8. 58	32. 45	18. 17	·1365					
9. 45	31. 25	22. 43	·1356					
9. 58	32. 15	23. 59	·1363					
11. 9	32. 45							
11. 23	31. 45							
11. 29	31. 40							
11. 39	30. 50							
11. 48	31. 30							
11. 55	30. 30							
12. 8	30. 30							
12. 54	34. 40							
12. 58	33. 45							
13. 9	33. 45							
13. 24	32. 40							
13. 41	33. 5							
13. 55	34. 45							
14. 7	34. 45							
14. 17	33. 50							
14. 52	34. 5							
18. 9	32. 45							
18. 23	33. 10							
	***							
20. 22	31. 10							
21. 34	31. 35							
23. 26	34. 35							
23. 59	35. 10							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 4		Jan. 4		Jan. 4		Jan. 4		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 35. 10	0. 0	·1363	0. 0	·03543	0. 0	59·1	59·3
1. 26	36. 0	1. 23	·1368	2. 42	·03577	1. 0	59·4	59·4
3. 0	34. 0	3. 48	·1371	12. 11	·03560	3. 0	59·4	59·6
9. 39	32. 30	10. 11	·1364	23. 45	·03538	9. 0	59·8	60·0
11. 39	32. 40	13. 11	·1366		(†)	21. 0	59·8	60·0
18. 57	32. 50	17. 37	·1374					
20. 46	31. 0	18. 40	·1376					
	***	21. 26	·1369					
22. 9	32. 25	23. 59	·1373					
23. 59	34. 15							
Jan. 5		Jan. 5		Jan. 5		Jan. 5		
0. 0	20. 34. 15	0. 0	·1373		†	1. 0	59·8	60·2
0. 24	33. 55	0. 56	·1376	0. 58	·03556	3. 0	60·0	60·4
	***	3. 41	·1378	6. 25	·03580	9. 0	59·8	60·5
1. 6	34. 30	8. 6	·1374	8. 30	·03580	21. 0	58·6	59·0
2. 22	34. 30	10. 55	·1371	18. 25	·03536			
4. 9	33. 40	15. 48	·1376	22. 7	·03520			
6. 4	33. 5	17. 57	·1378	22. 25	·03527			
6. 51	33. 10	18. 26	·1376	23. 59	·03532			
9. 39	32. 25	19. 21	·1381					
13. 24	33. 50	20. 11	·1378					
15. 58	33. 40	20. 40	·1371					
16. 14	33. 30	21. 27	·1366					
16. 38	33. 50	21. 57	·1350					
16. 54	33. 0	23. 21	·1366					
17. 32	33. 50	23. 41	·1363					
17. 41	32. 55	23. 59	·1365					
17. 54	33. 10							
18. 21	32. 35							
18. 30	33. 0							
18. 41	32. 35							
19. 26	33. 40							
19. 58	32. 30							
	***							
20. 24	32. 10							
21. 15	34. 30							
21. 44	33. 15							
21. 57	33. 55							
22. 12	33. 25							
22. 28	35. 10							
22. 48	35. 20							
23. 5	34. 15							
23. 23	34. 35							
23. 41	33. 30							
23. 59	33. 55							
Jan. 6		Jan. 6		Jan. 6		Jan. 6		
0. 0	20. 33. 55	0. 10	·1365	0. 0	·03532	1. 0	59·5	60·0
0. 57	34. 50	0. 40	·1371	5. 15	·03582	3. 0	59·3	59·8
1. 9	35. 20	1. 43	·1374	5. 43	·03577	9. 0	59·8	60·0
1. 53	34. 30	1. 54	·1379	6. 11	·03595	21. 30	59·8	60·4
1. 58	35. 5	2. 12	·1376	9. 29	·03564			
2. 23	34. 10	2. 22	·1384	11. 36	·03524			
	***	2. 43	·1374	12. 11	·03532			
2. 30	35. 20	2. 56	·1382	12. 50	·03520			
	***	3. 14	·1373	20. 0	·03555			
3. 26	34. 50	3. 40	·1372	21. 45	·03539			
Jan. 6		Jan. 6		Jan. 6				
h m	° ′ ″	h m		h m		h m	°	°
3. 43	20. 34. 55	4. 2	·1366	23. 59	·03540			
3. 59	34. 25	4. 18	·1353					
4. 13	35. 10	4. 56	·1351					
4. 25	34. 25	5. 12	·1359					
4. 30	35. 25	5. 50	·1349					
4. 41	33. 55	6. 9	·1358					
4. 56	31. 40	6. 20	·1354					
5. 9	30. 10	6. 41	·1359					
5. 28	32. 40	6. 53	·1356					
5. 41	32. 55	7. 38	·1360					
5. 55	31. 35	8. 6	·1364					
6. 11	32. 25	8. 26	·1374					
6. 23	34. 5	8. 50	·1368					
6. 27	33. 25	9. 34	·1362					
6. 43	33. 35	10. 4	·1374					
6. 55	32. 50	10. 12	·1367					
7. 9	33. 30	10. 28	·1372					
7. 19	33. 0	10. 52	·1368					
7. 43	33. 50	11. 12	·1378					
7. 57	32. 50	11. 43	·1364					
8. 27	32. 15	11. 55	·1361					
8. 32	32. 40	12. 22	·1371					
8. 58	32. 40	13. 0	·1367					
9. 40	29. 40	13. 31	·1360					
9. 52	29. 50	13. 41	·1361					
10. 9	31. 30	13. 58	·1356					
10. 19	30. 20	14. 40	·1358					
10. 27	30. 20	15. 4	·1364					
10. 39	30. 40	15. 15	·1358					
10. 53	29. 50	15. 25	·1359					
11. 9	30. 40	15. 41	·1359					
11. 19	30. 0	16. 15	·1364					
11. 26	29. 40	17. 0	·1365					
11. 58	33. 10	17. 21	·1362					
12. 12	32. 40	17. 42	·1366					
12. 29	34. 25	17. 56	·1364					
12. 49	32. 50	20. 12	·1361					
13. 1	31. 0	20. 26	·1362					
13. 23	31. 20	20. 52	·1360					
13. 38	33. 0	21. 56	·1364					
13. 44	32. 45	22. 29	·1362					
14. 25	35. 50	22. 41	·1364					
14. 38	35. 40	23. 59	·1356					
14. 46	34. 30							
15. 15	34. 30							
15. 26	33. 45							
16. 25	33. 35							
16. 36	32. 40							
16. 53	33. 15							
17. 38	32. 30							
17. 54	32. 40							
18. 12	32. 30							
18. 50	32. 50							
19. 55	32. 5							
20. 13	31. 5							
20. 43	31. 5							
21. 58	33. 25							
22. 24	33. 10							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol **:** attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 6								
h m	° ′ ″	h m		h m		h m	°	°
22. 37	20. 34. 40							
22. 48	34. 35							
23. 45	36. 25							
23. 59	35. 0							
Jan. 7		Jan. 7		Jan. 7		Jan. 7		
0. 0	20. 35. 0	0. 0	·1356	0. 0	·03540	0. 0	59·8	60·3
0. 26	35. 0	0. 18	·1356	5. 53	·03600	9. 0	60·2	61·0
0. 53	36. 30	0. 45	·1369	6. 41	·03621	21. 0	61·6	62·4
1. 9	35. 30	0. 56	·1368	7. 40	·03620			
1. 31	35. 45	1. 19	·1371	8. 57	·03632			
2. 8	35. 10	1. 57	·1368	11. 43	·03611			
2. 23	35. 45	2. 13	·1369	15. 35	·03645			
2. 53	34. 30	3. 29	·1364	16. 11	·03633			
3. 28	34. 50	3. 44	·1367	18. 36	·03657			
4. 9	32. 30	4. 0	·1364	20. 4	·03666			
4. 28	33. 45	4. 14	·1368	20. 40	·03656			
5. 11	34. 45	5. 33	·1369	22. 18	·03663			
5. 21	35. 35	5. 55	·1360	23. 59	·03663			
5. 28	34. 50	6. 26	·1369					
5. 38	34. 50	6. 49	·1364					
5. 50	33. 40	7. 24	·1369					
5. 57	31. 40	7. 46	·1364					
6. 16:	30. 15	7. 59	·1366					
6. 36	33 50	8. 27	·1355					
6. 54	35. 20	8. 46	·1360					
7. 13	34. 15	9. 12	·1358					
7. 26	34. 15	9. 28	·1362					
7. 36	34. 50	9. 41	·1361					
7. 58	33. 30	9. 53	·1366					
8. 13	34. 5	10. 12	·1365					
8. 26	32. 30	10. 38	·1359					
8. 37	32. 15	10. 55	·1362					
8. 56	33. 30	11. 9	·1358					
9. 12	31. 40	11. 19	·1359					
9. 22	31. 10	11. 26	·1368					
9. 26	31. 35	11. 41	·1365					
9. 36	31. 0	11. 54	·1358					
9. 54	32. 55	12. 4	·1359					
10. 41	31. 0	12. 25	·1354					
10. 54	31. 5	12. 35	·1358					
11. 2	33. 45	12. 54	·1356					
11. 24	30. 20	13. 24	·1360					
11. 38	31. 0	14. 42	·1362					
11. 52	30. 10	15. 10	·1359					
12. 0	27. 30	15. 44	·1369					
12. 22	29. 30	16. 9	·1371					
12. 28	29. 30	16. 57	·1366					
12. 54	31. 45	17. 55	·1369					
13. 39:	33. 25	18. 0	·1366					
14. 8	31. 45	18. 19	·1374					
14. 32	31. 55	18. 41	·1378					
14. 53:	30. 45	19. 6	·1376					
15. 8	32. 35	19. 55	·1364					
15. 16	32. 55	20. 18	·1368					
15. 35	36. 10	21. 10	·1364					
16. 7	32. 50	21. 41	·1366					
16. 36	30. 40	22. 59	·1364					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 7		Jan. 7						
h m	° ′ ″	h m		h m		h m	°	°
16. 51	20. 31. 30	23. 59	·1364					
16. 57	31. 20							
17. 18	32. 20							
17. 27	32. 10							
17. 46	32. 25							
17. 54	33. 0							
18. 1	32. 0							
18. 23	31. 50							
18. 56	33. 20							
19. 16	33. 20							
19. 25	32. 55							
19. 57	34. 30							
20. 8	35. 55							
20. 21	33. 20							
20. 32	32. 50							
20. 52	32. 50							
20. 58	32. 35							
21. 24	33. 10							
21. 40	35. 10							
21. 51	34. 25							
22. 10	35. 15							
22. 17	34. 45							
22. 33	36. 55							
	***							
23. 9	35. 5							
23. 25	34. 50							
23. 43	36. 5							
23. 54	36. 0							
23. 59	36. 40							
Jan. 8		Jan. 8		Jan. 8		Jan. 8		
0. 0	20. 36. 40	0. 0	·1364	0. 0	·03663	1. 0	60·[illegible]	61·2
0. 3	36. 10	0. 42	·1366	0. 55	·03644	3. 0	60·2	60·2
1. 0	38. 15	1. 9	·1359	5. 12	·03622	9. 0	59·3	59·0
1. 9	37. 10	1. 41	·1362	5. 41	·03632	21. 0	57·8	57·0
1. 23	37. 10	1. 59	·1358	7. 40	·03604			
1. 40	39. 40	2. 26	·1364	8. 54	·03601			
1. 56	39. 40	2. 59	·1372	10. 57	·03557			
2. 26	36. 25	4. 4	·1374	11. 26	·03563			
3. 3	35. 30	4. 41	·1366	12. 11	·03524			
3. 23	36. 20	4. 44	·1366	12. 17	·03537			
4. 5	36. 10	5. 12	·1358	12. 27	·03520			
4. 19	37. 5	5. 36	·1358	13. 5	·03537			
4. 25	37. 0	5. 53	·1364	13. 43	·03496			
4. 35	38. 20	6. 12	·1368	14. 27	·03496			
4. 54	38. 10	6. 22	·1366	14. 44	·03463			
5. 8	36. 45	6. 41	·1369	14. 56	·03477			
5. 25	33. 10	6. 49	·1367	15. 27	·03451			
5. 29	33. 10	7. 5	·1369	16. 58	·03416			
5. 41	31. 55	7. 14	·1364	19. 56	·03463			
5. 53	33. 40	7. 28	·1368	22. 11	·03451			
5. 57	33. 0	7. 41	·1364	23. 59	·03478			
6. 20	35. 30	7. 47	·1367					
6. 31	34. 35	7. 58	·1364					
6. 41	35. 10	8. 14	·1356					
6. 55	34. 0	8. 27	·1358					
7. 1	33. 45	8. 43	·1348					
7. 15	34. 10	8. 52	·1354					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 8		Jan. 8						
h m	° ′ ″	h m		h m		h m	°	°
7. 53	20. 32. 55	9. 5	·1369					
8. 0	33. 25	9. 11	·1360					
8. 17	31. 55	9. 18	·1366					
8. 24	31. 55	9. 29	·1360					
8. 39	28. 0	9. 52	·1368					
8. 55	17. 30	10. 11	·1354					
8. 59	17. 40	10. 26	·1362					
9. 1	16. 20	10. 42	·1356					
9. 14	25. 25	10. 53	·1361					
9. 28	26. 30	11. 11	·1356					
9. 36	25. 50	11. 27	·1358					
9. 53	31. 25	11. 43	·1369					
10. 8	29. 20	11. 56	·1366					
10. 31	27. 40	12. 6	·1368					
10. 56	26. 35	12. 18	·1360					
11. 14	30. 20	12. 25	·1372					
11. 31	30. 55	12. 41	·1362					
11. 59	21. 0	12. 55	·1353					
12. 8	21. 0	13. 13	·1371					
12. 12	23. 50	13. 30	·1382					
12. 23	21. 20	14. 18	·1374					
12. 50	29. 35	14. 41	·1362					
13. 9	31. 45	15. 9	·1336					
13. 24	30. 0	16. 12	·1364					
13. 37	24. 10	16. 45	·1374					
13. 53	25. 40	17. 11	·1364					
13. 57	24. 10	17. 28	·1359					
14. 25	25. 0	17. 55	·1356					
14. 33	21. 50	18. 15	·1360					
14. 38	22. 0	18. 42	·1355					
15. 10	33. 15	19. 12	·1363					
15. 21	33. 35	19. 27	·1358					
15. 32	32. 20	19. 52	·1361					
15. 55	37. 30	20. 8	·1360					
16. 8	36. 25	20. 55	·1366					
16. 21	34. 50	21. 24	·1358					
17. 12	35. 50	22. 26	·1358					
17. 37	32. 30	23. 28	·1344					
17. 46	31. 40	23. 54	·1348					
	***	23. 59	·1357					
18. 25	36. 40							
18. 32	36. 35							
18. 40	34. 30							
18. 43	35. 10							
	***							
19. 9	33. 30							
19. 15	34. 15							
19. 38	32. 40							
19. 51	32. 35							
20. 1	31. 25							
20. 24	32. 35							
20. 31	32. 35							
20. 56	34. 35							
21. 6	34. 0							
21. 26	33. 50							
22. 1	35. 10							
22. 10	34. 35							
22. 30	37. 25							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 8								
h m	° ′ ″	h m		h m		h m	°	°
22. 41	20. 36. 40							
	***							
23. 0	38. 40							
	***							
23. 36	38. 30							
23. 40	37. 30							
23. 45	38. 25							
23. 50	36. 40							
23. 59	37. 55							
Jan. 9		Jan. 9		Jan. 9		Jan. 9		
0. 0	20. 37. 55	0. 0	·1357	0. 0	·03478	1. 0	59 ·1	59 ·3
0. 20	38. 30	0. 12	·1362	1. 3	·03484	3. 0	59 ·6	59 ·4
0. 30	40. 30	0. 29	·1364	2. 52	·03546	9. 0	59 ·3	59 ·0
0. 45	40. 40	1. 21	·1355	4. 53	·03536	21. 0	59 ·6	59 ·5
0. 57	41. 20	1. 36	·1359	5. 10	·03555	22. 0	59 ·3	59 ·3
1. 9	40. 30	1. 56	·1348	5. 42	·03537	23. 0	59 ·6	59 ·4
1. 41	41. 30	2. 13	·1358	7. 27	·03523			
1. 46	40. 5	2. 19	·1356	7. 56	·03547			
1. 55	41. 10	2. 36	·1363	8. 5	·03536			
2. 26	34. 30	2. 57	·1354	8. 11	·03542			
3. 5	39. 50	3. 14	·1347	8. 26	·03526			
3. 19	36. 40	3. 30	·1355	9. 25	·03516			
3. 38	36. 35	3. 57	·1352	10. 41	·03526			
4. 3	33. 20	4. 20	·1367	11. 5	·03517			
4. 9	31. 20	4. 41	·1362	11. 56	·03520			
4. 26	33. 30	4. 55	·1345	13. 12	·03500			
4. 41	34. 10	5. 13	·1368	13. 41	·03506			
4. 47	32. 45	5. 26	·1364	14. 19	·03480			
4. 54	32. 35	5. 59	·1361	16. 3	·03502			
5. 0	26. 5	6. 14	·1366	22. 42	·03515			
5. 5	26. 5	7. 10	·1354	23. 11	·03523			
5. 11	30. 0	7. 35	·1336	23. 59	·03517			
5. 30	33. 45	7. 54	·1352					
6. 25	33. 40	8. 6	·1356					
6. 57	34. 50	8. 19	·1386					
7. 25	33. 30	8. 34	·1363					
7. 29	30. 0	8. 53	·1359					
7. 39	22. 30	9. 3	·1365					
7. 58	29. 40	9. 26	·1352					
8. 9	21. 30	9. 53	·1357					
8. 21	29. 55	10. 11	·1352					
8. 39	30. 20	10. 14	·1354					
9. 9	29. 45	10. 28	·1349					
9. 14	30. 20	11. 0	·1359					
9. 23	29. 45	11. 14	·1356					
9. 34	29. 30	11. 56	·1354					
9. 51	30. 35	12. 20	·1358					
10. 9	31. 0	12. 41	·1366					
10. 21	30. 40	12. 55	·1372					
10. 39	31. 50	13. 11	·1362					
10. 59	29. 30	13. 34	·1357					
11. 14	29. 30	14. 5	·1376					
11. 53	32. 50	14. 25	·1368					
12. 9	30. 0	14. 42	·1362					
12. 20	30. 35	15. 12	·1356					
12. 32	30. 35	15. 26	·1358					
12. 43	32. 50	15. 55	·1356					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 9		Jan. 9						
h m	° ′ ″	h m		h m		h m	°	°
12. 58	20. 32. 0	16. 12	·1360					
13. 10	31. 40	16. 20	·1356					
13. 59	34. 0	16. 29	·1359					
14. 19	30. 55		***					
14. 30	30. 35	19. 22	·1364					
14. 45	32. 50	20. 15	·1358					
14. 56	32. 30	21. 45	·1362					
15. 7	31. 40	22. 42	·1356					
15. 22	32. 0	23. 8	·1351					
15. 36	31. 45	23. 59	·1354					
16. 0	34. 50							
16. 9	33. 0							
16. 23	33. 40							
16. 45	32. 55							
17. 15	33. 30							
17. 29	32. 30							
	***							
17. 47	32. 30							
	***							
18. 15	31. 35							
	***							
18. 53	32. 20							
19. 4	31. 30							
19. 50	33. 50							
20. 43	31. 55							
21. 38	34. 25							
21. 50	35. 55							
21. 57	35. 30							
22. 9	36. 50							
22. 26	37. 15							
22. 56	35. 50							
23. 6	37. 5							
23. 14	36. 15							
23. 28	36. 40							
23. 39	38. 0							
23. 55	37. 0							
23. 59	37. 0							
Jan. 10		Jan. 10		Jan. 10		Jan. 10		
0. 0	20. 37. 0	0. 0	·1354	0. 0	·03517	0. 0	59·8	60·0
0. 13	36. 45	0. 40	·1360	2. 54	·03556	1. 0	59·8	60·0
1. 1	36. 50	1. 27	·1366	6. 26	·03543	2. 0	59·8	60·5
1. 36	37. 10	2. 14	·1363	8. 45	·03517	3. 0	59·9	61·0
2. 11	35. 30	2. 23	·1368	9. 10	·03520	9. 0	58·3	58·1
2. 14	36. 15	3. 9	·1367	9. 24	·03502	21. 0	58·1	58·4
2. 20	35. 15	3. 26	·1364	9. 42	·03512	22. 0	58·0	58·0
2. 25	36. 40	3. 45	·1360	10. 25	·03484	23. 0	58·0	57·9
2. 39	36. 25	4. 41	·1368	11. 40	·03502			
3. 6	37. 40	5. 22	·1354	13. 19	·03498			
3. 27	36. 30	5. 41	·1359	13. 40	·03492			
3. 39	37. 0	5. 55	·1366	14. 6	·03496			
3. 56	35. 30	6. 10	·1363	14. 41	·03483			
4. 8	35. 20	6. 14	·1367	14. 54	·03487			
4. 12	36. 20	6. 45	·1364	15. 25	·03461			
4. 21	34. 55	7. 6	·1359	17. 8	·03480			
4. 36	34. 50	8. 19	·1368	23. 59	·03436			
4. 50	36. 30	8. 42	·1358					
5. 13	36. 40	9. 12	·1362					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 10		Jan. 10						
h m	° ′ ″	h m		h m		h m	°	°
5. 20	20. 34. 35	9. 22	·1358					
5. 34	31. 45	9. 42	·1384					
5. 43	28. 30	10. 17	·1372					
6. 8	26. 50	10. 41	·1359					
6. 25	28. 5	10. 55	·1364					
6. 39	31. 40	11. 24	·1356					
	***	11. 45	·1360					
6. 55	31. 35	12. 29	·1364					
7. 16	34. 30	12. 59	·1360					
7. 35	33. 50	13. 13	·1364					
7. 40	33. 5	13. 24	·1360					
7. 55	33. 40	13. 40	·1362					
8. 6	33. 20	13. 55	·1359					
8. 16	32. 15	14. 11	·1354					
8. 25	32. 40	14. 21	·1356					
8. 39	31. 10	14. 39	·1354					
8. 57	30. 50	15. 0	·1358					
9. 6	30. 10	15. 27	·1349					
9. 10	30. 35	15. 58	·1364					
9. 25	19. 15	16. 13	·1366					
9. 50	27. 5	16. 27	·1363					
10. 6	29. 45	16. 41	·1366					
10. 18	29. 30	16. 51	·1364					
10. 24	29. 50	17. 41	·1369					
10. 32	29. 10	17. 57	·1370					
11. 6	29. 25	18. 11	·1367					
11. 10	30. 5	18. 44	·1367					
11. 26	30. 15	19. 0	·1372					
11. 41	31. 35	19. 24	·1366					
11. 57	29. 55	19. 52	·1368					
12. 16	31. 0	20. 11	·1366					
12. 42	30. 10	20. 51	·1344					
	(†)	21. 11	·1346					
13. 26	32. 20	21. 20	·1352					
13. 41	30. 15	22. 11	·1359					
14. 3	33. 45	22. 18	·1364					
14. 26	31. 45	22. 41	·1359					
14. 38	32. 20	23. 9	·1364					
14. 42	32. 15	23. 39	·1359					
15. 10	43. 50	23. 52	·1362					
15. 26	37. 30	23. 59	·1360					
15. 43	33. 10							
15. 58	32. 15							
16. 2	32. 40							
	***							
16. 21	31. 45							
16. 56	32. 50							
17. 23	31. 50							
17. 27	30. 55							
17. 42	31. 40							
17. 54	32. 50							
18. 6	32. 10							
	***							
18. 26	33. 40							
	***							
19. 8	32. 25							
19. 24	32. 50							
19. 38	32. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 8		Jan. 8						
h m	° ′ ″	h m		h m		h m	°	°
7. 53	20. 32. 55	9. 5	·1369					
8. 0	33. 25	9. 11	·1360					
8. 17	31. 55	9. 18	·1366					
8. 24	31. 55	9. 29	·1360					
8. 39	28. 0	9. 52	·1368					
8. 55	17. 30	10. 11	·1354					
8. 59	17. 40	10. 26	·1362					
9. 1	16. 20	10. 42	·1356					
9. 14	25. 25	10. 53	·1361					
9. 28	26. 30	11. 11	·1356					
9. 36	25. 50	11. 27	·1358					
9. 53	31. 25	11. 43	·1369					
10. 8	29. 20	11. 56	·1366					
10. 31	27. 40	12. 6	·1368					
10. 56	26. 35	12. 18	·1360					
11. 14	30. 20	12. 25	·1372					
11. 31	30. 55	12. 41	·1362					
11. 59	21. 0	12. 55	·1353					
12. 8	21. 0	13. 13	·1371					
12. 12	23. 50	13. 30	·1382					
12. 23	21. 20	14. 18	·1374					
12. 50	29. 35	14. 41	·1362					
13. 9	31. 45	15. 9	·1336					
13. 24	30. 0	16. 12	·1364					
13. 37	24. 10	16. 45	·1374					
13. 53	25. 40	17. 11	·1364					
13. 57	24. 10	17. 28	·1359					
14. 25	25. 0	17. 55	·1356					
14. 33	21. 50	18. 15	·1360					
14. 38	22. 0	18. 42	·1355					
15. 10	33. 15	19. 12	·1363					
15. 21	33. 35	19. 27	·1358					
15. 32	32. 20	19. 52	·1361					
15. 55	37. 30	20. 8	·1360					
16. 8	36. 25	20. 55	·1366					
16. 21	34. 50	21. 24	·1358					
17. 12	35. 50	22. 26	·1358					
17. 37	32. 30	23. 28	·1344					
17. 46	31. 40	23. 54	·1348					
	***	23. 59	·1357					
18. 25	36. 40							
18. 32	36. 35							
18. 40	34. 30							
18. 43	35. 10							
	***							
19. 9	33. 30							
19. 15	34. 15							
19. 38	32. 40							
19. 51	32. 35							
20. 1	31. 25							
20. 24	32. 35							
20. 31	32. 35							
20. 56	34. 35							
21. 6	34. 0							
21. 26	33. 50							
22. 1	35. 10							
22. 10	34. 35							
22. 30	37. 25							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 8								
h m	° ′ ″	h m		h m		h m	°	°
22. 41	20. 36. 40							
	***							
23. 0	38. 40							
	***							
23. 36	38. 30							
23. 40	37. 30							
23. 45	38. 25							
23. 50	36. 40							
23. 59	37. 55							
Jan. 9		Jan. 9		Jan. 9		Jan. 9		
0. 0	20. 37. 55	0. 0	·1357	0. 0	·03478	1. 0	59·1	59·3
0. 20	38. 30	0. 12	·1362	1. 3	·03484	3. 0	59·6	59·4
0. 30	40. 30	0. 29	·1364	2. 52	·03546	9. 0	59·3	59·0
0. 45	40. 40	1. 21	·1355	4. 53	·03536	21. 0	59·6	59·5
0. 57	41. 20	1. 36	·1359	5. 10	·03555	22. 0	59·3	59·3
1. 9	40. 30	1. 56	·1348	5. 42	·03537	23. 0	59·6	59·4
1. 41	41. 30	2. 13	·1358	7. 27	·03523			
1. 46	40. 5	2. 19	·1356	7. 56	·03547			
1. 55	41. 10	2. 36	·1363	8. 5	·03536			
2. 26	34. 30	2. 57	·1354	8. 11	·03542			
3. 5	39. 50	3. 14	·1347	8. 26	·03526			
3. 19	36. 40	3. 30	·1355	9. 25	·03516			
3. 38	36. 35	3. 57	·1352	10. 41	·03526			
4. 3	33. 20	4. 20	·1367	11. 5	·03517			
4. 9	31. 20	4. 41	·1362	11. 56	·03520			
4. 26	33. 30	4. 55	·1345	13. 12	·03500			
4. 41	34. 10	5. 13	·1368	13. 41	·03506			
4. 47	32. 45	5. 26	·1364	14. 19	·03480			
4. 54	32. 35	5. 59	·1361	16. 3	·03502			
5. 0	26. 5	6. 14	·1366	22. 42	·03515			
5. 5	26. 5	7. 10	·1354	23. 11	·03523			
5. 11	30. 0	7. 35	·1336	23. 59	·03517			
5. 30	33. 45	7. 54	·1352					
6. 25	33. 40	8. 6	·1356					
6. 57	34. 50	8. 19	·1386					
7. 25	33. 30	8. 34	·1363					
7. 29	30. 0	8. 53	·1359					
7. 39	22. 30	9. 3	·1365					
7. 58	29. 40	9. 26	·1352					
8. 9	21. 30	9. 53	·1357					
8. 21	29. 55	10. 11	·1352					
8. 39	30. 20	10. 14	·1354					
9. 9	29. 45	10. 28	·1349					
9. 14	30. 20	11. 0	·1359					
9. 23	29. 45	11. 14	·1356					
9. 34	29. 30	11. 56	·1354					
9. 51	30. 35	12. 20	·1358					
10. 9	31. 0	12. 41	·1366					
10. 21	30. 40	12. 55	·1372					
10. 39	31. 50	13. 11	·1362					
10. 59	29. 30	13. 34	·1357					
11. 14	29. 30	14. 5	·1376					
11. 53	32. 50	14. 25	·1368					
12. 9	30. 0	14. 42	·1362					
12. 20	30. 35	15. 12	·1356					
12. 32	30. 35	15. 26	·1358					
12. 43	32. 50	15. 55	·1356					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 9		Jan. 9						
h m	° ′ ″	h m		h m		h m	°	°
12. 58	20. 32. 0	16. 12	·1360					
13. 10	31. 40	16. 20	·1356					
13. 59	34. 0	16. 29	·1359					
14. 19	30. 55		***					
14. 30	30. 35	19. 22	·1364					
14. 45	32. 50	20. 15	·1358					
14. 56	32. 30	21. 45	·1362					
15. 7	31. 40	22. 42	·1356					
15. 22	32. 0	23. 8	·1351					
15. 36	31. 45	23. 59	·1354					
16. 0	34. 50							
16. 9	33. 0							
16. 23	33. 40							
16. 45	32. 55							
17. 15	33. 30							
17. 29	32. 30							
	***							
17. 47	32. 30							
	***							
18. 15	31. 35							
	***							
18. 53	32. 20							
19. 4	31. 30							
19. 50	33. 50							
20. 43	31. 55							
21. 38	34. 25							
21. 50	35. 55							
21. 57	35. 30							
22. 9	36. 50							
22. 26	37. 15							
22. 56	35. 50							
23. 6	37. 5							
23. 14	36. 15							
23. 28	36. 40							
23. 39	38. 0							
23. 55	37. 0							
23. 59	37. 0							
Jan. 10		Jan. 10		Jan. 10		Jan. 10		
0. 0	20. 37. 0	0. 0	·1354	0. 0	·03517	0. 0	59·8	60·0
0. 13	36. 45	0. 40	·1360	2. 54	·03556	1. 0	59·8	60·0
1. 1	36. 50	1. 27	·1366	6. 26	·03543	2. 0	59·8	60·5
1. 36	37. 10	2. 14	·1363	8. 45	·03517	3. 0	59·9	61·0
2. 11	35. 30	2. 23	·1368	9. 10	·03520	9. 0	58·3	58·1
2. 14	36. 15	3. 9	·1367	9. 24	·03502	21. 0	58·1	58·4
2. 20	35. 15	3. 26	·1364	9. 42	·03512	22. 0	58·0	58·0
2. 25	36. 40	3. 45	·1360	10. 25	·03484	23. 0	58·0	57·9
2. 39	36. 25	4. 41	·1368	11. 40	·03502			
3. 6	37. 40	5. 22	·1354	13. 19	·03498			
3. 27	36. 30	5. 41	·1359	13. 40	·03492			
3. 39	37. 0	5. 55	·1366	14. 6	·03496			
3. 56	35. 30	6. 10	·1363	14. 41	·03483			
4. 8	35. 20	6. 14	·1367	14. 54	·03487			
4. 12	36. 20	6. 45	·1364	15. 25	·03461			
4. 21	34. 55	7. 6	·1359	17. 8	·03480			
4. 36	34. 50	8. 19	·1368	23. 59	·03436			
4. 50	36. 30	8. 42	·1358					
5. 13	36. 40	9. 12	·1362					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 10		Jan. 10						
h m	° ′ ″	h m		h m		h m		°
5. 20	20. 34. 35	9. 22	·1358					
5. 34	31. 45	9. 42	·1384					
5. 43	28. 30	10. 17	·1372					
6. 8	26. 50	10. 41	·1359					
6. 25	28. 5	10. 55	·1364					
6. 39	31. 40	11. 24	·1356					
	***	11. 45	·1360					
6. 55	31. 35	12. 29	·1364					
7. 16	34. 30	12. 59	·1360					
7. 35	33. 50	13. 13	·1364					
7. 40	33. 5	13. 24	·1360					
7. 55	33. 40	13. 40	·1362					
8. 6	33. 20	13. 55	·1359					
8. 16	32. 15	14. 11	·1354					
8. 25	32. 40	14. 21	·1356					
8. 39	31. 10	14. 39	·1354					
8. 57	30. 50	15. 0	·1358					
9. 6	30. 10	15. 27	·1349					
9. 10	30. 35	15. 58	·1364					
9. 25	19. 15	16. 13	·1366					
9. 50	27. 5	16. 27	·1363					
10. 6	29. 45	16. 41	·1366					
10. 18	29. 30	16. 51	·1364					
10. 24	29. 50	17. 41	·1369					
10. 32	29. 10	17. 57	·1370					
11. 6	29. 25	18. 11	·1367					
11. 10	30. 5	18. 44	·1367					
11. 26	30. 15	19. 0	·1372					
11. 41	31. 35	19. 24	·1366					
11. 57	29. 55	19. 52	·1368					
12. 16	31. 0	20. 11	·1366					
12. 42	30. 10	20. 51	·1344					
	(†)	21. 11	·1346					
13. 26	32. 20	21. 20	·1352					
13. 41	30. 15	22. 11	·1359					
14. 3	33. 45	22. 18	·1364					
14. 26	31. 45	22. 41	·1359					
14. 38	32. 20	23. 9	·1364					
14. 42	32. 15	23. 39	·1359					
15. 10	43. 30	23. 52	·1362					
15. 26	37. 30	23. 59	·1360					
15. 43	33. 10							
15. 58	32. 15							
16. 2	32. 40							
	***							
16. 21	31. 45							
16. 56	32. 50							
17. 23	31. 50							
17. 27	30. 55							
17. 42	31. 40							
17. 54	32. 50							
18. 6	32. 10							
	***							
18. 26	33. 40							
	***							
19. 8	32. 25							
19. 24	32. 50							
19. 38	32. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 10								
h m	° ′ ″	h m		h m		h m	°	°
19. 56	20. 32. 50							
20. 29	35. 50							
20. 35	35. 35							
20. 40	36. 15							
20. 53	35. 0							
21. 2	35. 0							
21. 16	33. 30							
21. 30	33. 5							
21. 36	33. 40							
21. 43	32. 40							
21. 56	34. 30							
22. 13	36. 10							
22. 23	34. 30							
22. 31	33. 20							
22. 56	36. 50							
23. 12	34. 20							
23. 25	36. 20							
23. 27	34. 45							
23. 41	37. 40							
23. 44	36. 55							
23. 59	37. 35							
Jan. 11		Jan. 11		Jan. 11		Jan. 11		
0. 0	20. 37. 35	0. 0	·1360	0. 0	·03436	0. 0	58·9	59·0
0. 9	36. 0	0. 44	·1358	2. 11	·03482	1. 0	58·8	59·5
0. 20	34. 50	1. 13	·1360	4. 11	·03528	2. 0	59·1	59·8
0. 35	35. 55	1. 27	·1366	5. 39	·03494	3. 0	59·3	60·1
0. 53	36. 0	1. 56	·1366	6. 32	·03480	9. 0	57·8	58·0
1. 25	39. 0	2. 29	·1368	7. 0	·03484	21. 0	60·8	60·9
1. 54	36. 20	2. 53	·1366	7. 25	·03476			
2. 1	36. 20	3. 20	·1352	10. 58	·03484			
2. 9	35. 30	3. 40	·1356	11. 22	·03504			
2. 34	37. 55	3. 44	·1354	11. 45	·03497			
2. 56	37. 15	4. 13	·1366	12. 4	·03504			
3. 3	35. 30	4. 52	·1357	13. 27	·03511			
3. 9	35. 30	5. 15	·1362	13. 56	·03530			
3. 18	32. 45	5. 55	·1369	14. 24	·03517			
3. 26	31. 25	6. 41	·1356	14. 40	·03523			
3. 34	32. 0	7. 10	·1379	17. 30	·03515			
3. 50	29. 5	7. 21	·1364	22. 28	·03580			
3. 57	28. 55	7. 38	·1362	23. 59	·03560			
4. 9	31 20	7. 56	·1364					
4. 42;	34. 40	8. 13	·1356					
5. 1	33. 40	9. 12	·1346					
5. 12	34. 25	9. 24	·1348					
5. 41	32. 35	9. 40	·1340					
6. 9	35. 25	10. 6	·1350					
6. 24	35. 25	10. 13	·1358					
6. 32	33. 55	10. 27	·1354					
6. 47	26. 15	10. 56	·1358					
6. 54	26. 15	11. 15	·1345					
7. 12	30. 30	11. 44	·1355					
	***	11. 56	·1353					
7. 43	29. 20	12. 13	·1365					
8. 6	31. 55	12. 26	·1372					
8. 21	31. 10	12. 44	·1360					
8. 56	33. 20	12. 59	·1353					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 11		Jan. 11						
h m	° ′ ″	h m		h m		h m	°	°
9. 1	20. 32. 0	13. 9	·1354					
9. 12	31. 35	13. 28	·1348					
9. 26	34. 25	13. 57	·1347					
9. 36	30. 5	14. 12	·1352					
9. 56	28. 20	14. 25	·1349					
10. 10	31. 15	14. 41	·1346					
10. 17	29. 40	14. 50	·1350					
10. 26	29. 20	15. 12	·1351					
10. 39	31. 30	15. 20	·1347					
10. 43	32. 10	15. 53	·1351					
11. 6	31. 30	17. 8	·1360					
11. 13	32. 55	17. 26	·1355					
11. 23	32. 25	17. 41	·1358					
11. 32	32. 15	17. 55	·1356					
11. 54	24. 0	18. 20	·1357					
11. 59	24. 0	18. 39	·1361					
12. 12	22. 55	19. 14	·1355					
12. 23	25. 40	19. 25	·1357					
13. 9	32. 20	19. 40	·1354					
13. 23	32. 0	20. 39	·1353					
13. 33	30. 0	20. 44	·1350					
13. 55	32. 0	20. 55	·1353					
14. 7	34. 5	21. 13	·1348					
14. 33	29. 50	21. 45	·1351					
14. 43	31. 45	22. 22	·1347					
15. 7	33. 25	22. 57	·1348					
15. 12	33. 5	23. 52	·1344					
15. 38	33. 50	23. 59	·1347					
15. 48	33. 30							
16. 6	32. 30							
16. 16	32. 50							
16. 27	32. 0							
17. 8	35. 55							
17. 26	33. 10							
17. 42	33. 20							
18. 14	31. 30							
19. 4	32. 20							
19. 10	32. 5							
19. 27	31. 45							
19. 38	31. 20							
20. 14	31. 35							
	***							
20. 50	31. 50							
20. 56	31. 5							
21. 2	32. 25							
21. 10	32. 25							
21. 39	32. 45							
21. 53	34. 0							
	***							
22. 4	33. 30							
	***							
22. 48	35. 30							
22. 55	35. 10							
23. 0	35. 30							
23. 9	36. 30							
23. 14	35. 40							
23. 26	36. 35							
	***							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 11								
h m	° ′ ″	h m		h m		h m	°	°
23. 48	20. 34. 55							
23. 59.	35. 35							
Jan. 12		Jan. 12		Jan. 12		Jan. 12		
0. 0	20. 35. 35	0. 0	·1347	0. 0	·03560	1. 0	59 ·8	59 ·8
0. 22	36. 20	0. 10	·1348	3. 45	·03525	3. 0	59 ·2	59 ·0
0. 29	37. 5	1. 0	·1358	6. 30	·03483	9. 0	58 ·3	59 ·9
0. 38	36. 30	1. 24	·1359	7. 45	·03472	21. 0	57 ·8	57 ·3
1. 0	38. 55	1. 34	·1356	8. 11	·03492			
1. 13	38. 45	1. 51	·1360	11. 56	·03460			
1. 27	39. 40	2. 13	·1358	13. 42	·03423			
1. 55	38. 30	3. 26	·1363	14. 43	·03431			
2. 8	38. 55	3. 55	·1361	18. 56	·03398			
2. 16	38. 55	4. 56	·1365	21. 32	·03388			
2. 39	35. 10	6. 9	·1363	22. 56	·03396			
3. 6	34. 10	6. 20	·1367	23. 59	·03384			
3. 43	33. 45	6. 41	·1364					
3. 56	34. 15	6. 48	·1366					
4. 37	33. 25	6. 55	·1363					
4. 59	33. 45	7. 19	·1360					
6. 12	33. 20	7. 26	·1362					
6. 38:	33. 40	7. 48	·1346					
6. 56	34. 40	8. 9	·1350					
7. 23	33. 40	8. 25	·1355					
7. 37	34. 30	8. 40	·1353					
7. 53	28. 15	9. 18	·1360					
7. 56	29. 30	9. 42	·1361					
8. 10	30. 10	10. 19	·1365					
8. 26	31. 40	10. 55	·1357					
8. 35	30. 30	11. 20	·1364					
8. 57	30. 20	11. 58	·1360					
9. 27	32. 30	12. 12	·1365					
10. 2	32. 5	12. 39	·1366					
10. 15	32. 50	12. 44	·1361					
10. 26	32. 0	13. 19	·1368					
10. 49	31. 50	13. 31	·1366					
11. 26	32. 50	13. 52	·1360					
11. 49	32. 25	14. 20	·1358					
12. 26	32. 50	15. 4	·1361					
12. 39	31. 55	15. 14	·1359					
12. 56	34. 20	17. 35	·1365					
13. 12	35. 35	18. 11	·1362					
13. 30	34. 55	19. 21	·1363					
13. 42	35. 40	19. 58	·1361					
14. 9	32. 20	20. 25	·1362					
14. 25	32. 10	20. 40	·1361					
14. 42	33. 5	20. 54	·1363					
14. 57	33. 35	22. 23	·1361					
15. 9	32. 0	22. 54	·1362					
15. 22	31. 25	23. 12	·1365					
15. 53	34. 10	23. 59	·1365					
16. 9	34. 25							
16. 35	33. 30							
16. 53	33. 40							
17. 26	31. 35							
17. 57	32. 45							
18. 6	32. 30							
18. 28	33. 40							
Jan. 12								
h m	° ′ ″	h m		h m		h m	°	°
18. 43	20. 33. 50							
19. 9	32. 45							
19. 43	32. 30							
20. 4	31. 30							
20. 18	31. 20							
20. 29	31. 45							
20. 45	31. 15							
21. 5	32. 5							
21. 10	31. 30							
21. 23	32. 40							
21. 47	32. 30							
22. 41	33. 55							
22. 56	33. 55							
23. 14	36. 5							
23. 39	36. 40							
23. 48	36. 25							
23. 59	37. 25							
Jan. 13		Jan. 13		Jan. 13		Jan. 13		
0. 0	20. 37. 25	0. 0	·1365	0. 0	·03384	1. 0	58 ·8	58 ·0
0. 12	38. 15	0. 40	·1357	4. 15	·03483	3. 0	59 ·8	60 ·0
0. 23	37. 0	0. 59	·1362	7. 11	·03443	9. 0	58 ·3	58 ·0
0. 28	37. 0	2. 9	·1374	12. 13	·03436	22. 0	59 ·5	59 ·7
0. 37	36. 25	2. 20	·1371	14. 56	·03457			
1. 22	37. 45	3. 30	·1374	17. 13	·03447			
1. 54	35. 55	3. 41	·1381	22. 23	·03483			
2. 10	35. 50	3. 45	·1376	23. 59	·03480			
3. 50	32. 50	4. 11	·1375					
4. 4	33. 10	4. 20	·1376					
4. 12	33. 0	4. 57	·1367					
4. 54	33. 30	5. 11	·1370					
5. 8	34. 15	5. 24	·1362					
5. 14	32. 35	5. 30	·1367					
5. 25	30. 15	5. 39	·1366					
5. 38	31. 10	5. 54	·1373					
5. 49	33. 0	6. 29	·1372					
6. 23	32. 10	6. 43	·1368					
6. 39	33. 10	7. 7	·1372					
6. 56	30. 55	7. 44	·1360					
7. 5	31. 0	8. 12	·1368					
7. 22	30. 20	8. 30	·1364					
7. 38	30. 45	8. 42	·1366					
7. 53	29. 30	8. 57	·1365					
8. 25	31. 10	9. 20	·1367					
9. 9:	29. 55	9. 43	·1364					
9. 26	30. 45	10. 0	·1373					
9. 50	30. 10	10. 54	·1364					
10. 5	30. 55	11. 15	·1370					
10. 23	29. 35	11. 40	·1368					
10. 53	29. 0	11. 57	·1375					
11. 23	33. 35	12. 25	·1370					
11. 29	33. 35	12. 46	·1373					
11. 39	32. 15	13. 6	·1369					
11. 54	33. 35	13. 14	·1372					
12. 3	32. 50	13. 41	·1370					
12. 7	32. 50	13. 55	·1374					
12. 25	31. 20	14. 12	·1371					
12. 50	34. 0	14. 57	·1373					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 13		Jan. 13						
h m	° ′ ″	h m		h m		h m	°	°
12. 56	20. 33. 25	15. 55	·1379					
13. 14	34. 0	16. 41	·1377					
13. 29	33. 40	17. 20	·1382					
13. 42	34. 10	17. 55	·1379					
13. 59	33. 0	19. 14	·1383					
14. 38	33. 10	21. 56	·1372					
14. 53	34. 25	23. 59	·1374					
15. 6	33. 5							
15. 38	33. 45							
16. 8	32. 10							
16. 16	32. 25							
16. 41	34. 10							
17. 2	33. 40							
17. 13	32. 30							
18. 35	31. 55							
19. 28	31. 45							
20. 10	31. 30							
20. 34	31. 55							
21. 12	32. 0							
21. 36	32. 30							
23. 9	34. 45							
23. 16	35. 0							
23. 59	36. 0							
Jan. 14		Jan. 14		Jan. 14		Jan. 14		
0. 0	20. 36. 0	0. 0	·1374	0. 0	·03480	1. 0	60 ·2	60 ·1
0. 15	38. 0	0. 41	·1377	1. 19	·03498	8. 0	59 ·6	59 ·0
0. 27	37. 15	0. 54	·1374	7. 12	·03460	21. 0	57 ·8	57 ·5
1. 34	38. 5	1. 24	·1373	7. 41	·03471			
1. 53	37. 30	1. 50	·1369	10. 53	·03454			
2. 2	38. 15	1. 57	·1370	11. 41	·03463			
2. 23	37. 25	2. 13	·1364	19. 52	·03399			
2. 35	36. 10	2. 36	·1363	22. 11	·03393			
2. 51	34. 50	3. 10	·1370	23. 59	·03407			
3. 53	34. 35	3. 56	·1374					
3. 56	34. 50	4. 33	·1372					
4. 5	34. 25	4. 50	·1374					
4. 34	35. 30	5. 42	·1371					
4. 54	34. 0	5. 57	·1372					
5. 6	34. 40	6. 21	·1368					
5. 29	34. 30	6. 54	·1369					
6. 0	33. 35	7. 12	·1358					
6. 23	34. 30	7. 42	·1369					
6. 58	34. 0	8. 5	·1372					
7. 23	28. 30	8. 15	·1369					
7. 38	31. 30	8. 26	·1370					
7. 54	32. 40	8. 30	·1369					
8. 26	30. 55	9. 56	·1364					
8. 34	29. 45	10. 11	·1367					
8. 40	30. 15	10. 24	·1361					
8. 53	30. 20	10. 41	·1364					
9. 9	32. 30	10. 57	·1359					
9. 22	31. 45	11. 0	·1362					
9. 26	32. 0	11. 23	·1350					
9. 44	30. 40	11. 41	·1357					
9. 53	30. 40	11. 53	·1360					
10. 0	30. 10	11. 57	·1358					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 14		Jan. 14						
h m	° ′ ″	h m		h m		h m	°	°
10. 7	20. 32. 0	12. 14	·1361					
10. 11	32. 40	12. 22	·1358					
10. 26	30. 10	12. 29	·1360					
10. 39	30. 25	12. 45	·1356					
10. 54	29. 10	13. 11	·1368					
11. 2	31. 0	13. 36	·1362					
11. 13	32. 15	14. 12	·1361					
11. 23	31. 35	14. 26	·1369					
11. 35	34. 30	15. 3	·1365					
11. 47	32. 30	15. 24	·1368					
12. 4	34. 15	16. 16	·1368					
12. 13	32. 55	17. 44	·1373					
12. 34	32. 55	17. 55	·1370					
12. 51	30. 40	18. 11	·1375					
13. 17	33. 5	18. 19	·1374					
13. 42	30. 55	18. 30	·1376					
13. 56	32. 0	19. 5	·1375					
14. 9	31. 50	19. 15	·1372					
14. 18	32. 15	19 26	·1373					
14. 33	31. 25	19. 50	·1367					
14. 56	32. 25	19. 57	·1365					
15. 19	34. 30	20. 10	·1367					
15. 32	33. 50	20. 42	·1366					
15. 42	33. 50	20. 58	·1363					
15. 57	33. 30	21. 25	·1365					
16. 6	33. 50	23. 50	·1361					
16. 11	32. 40	23. 59	·1362					
16. 46:	33. 15							
17. 34	32. 35							
17. 45	33. 0							
17. 55	31. 50							
18. 8	31. 55							
18. 12	31. 0							
18. 28	31. 45							
18. 41	31. 5							
18. 53	31. 45							
18. 57	31. 25							
19. 6	32. 20							
19. 13	32. 20							
19. 30	32. 50							
19. 39	32. 10							
19. 54	33. 40							
19. 57	33. 15							
20. 9	34. 50							
20. 26	32. 55							
20. 44	32. 15							
21. 8	31. 10							
21. 55	32. 20							
22. 14	32. 30							
22. 23	32. 0							
	***							
22. 44	32. 35							
22. 54	34. 5							
23. 24	34. 20							
23. 54	34. 0							
23. 59	34. 35							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 15		Jan. 15		Jan. 15		Jan. 15		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 34. 35	0. 0	·1362	0. 0	·03407	1. 0	60 ·2	61 ·0
0. 30	35. 40	0. 24	·1366	1. 58	·03483	3. 0	59 ·9	60 ·0
1. 27	36. 20	0. 40	·1365	6. 0	·03466	9. 0	59 ·0	57 ·9
2. 33	35. 45	1. 11	·1369	7. 22	·03462	21. 0	58 ·9	59 ·2
2. 44	34. 30	2. 40	·1367	9. 14	·03432			
2. 54	34. 20	3. 9	·1371	9. 41	·03412			
3. 15	35. 0	3. 55	·1373	9. 54	·03420			
3. 52	34. 0	4. 15	·1372	10. 11	·03402			
4. 12	34. 40	4. 27	·1374	10. 37	·03416			
4. 28	34. 25	5. 14	·1369	23. 59	·03407			
5. 28	35. 0	5. 41	·1370					
5. 34	34. 40	6. 9	·1364					
	***	6. 44	·1357					
5. 56	35. 35	7. 20	·1359					
6. 6	35. 0	7. 27	·1362					
6. 12	34. 50	7. 41	·1360					
6. 21	35. 40	7. 46	·1368					
6. 29	34. 25	8. 8	·1366					
6. 58	32. 40	8. 15	·1377					
7. 13	33. 0	8. 56	·1359					
7. 25	32. 50	9. 21	·1383					
7. 42	28. 50	9. 25	·1377					
7. 58	30. 55	9. 42	·1365					
8. 10	28. 0	10. 0	·1378					
8. 21	30. 30	10. 19	·1358					
8. 27	30. 40	10. 41	·1365					
8. 39	32. 10	11. 5	·1354					
8. 51	31. 10	12. 11	·1368					
9. 3	25. 25	12. 56	·1363					
9. 16	26. 0	13. 14	·1366					
9. 20	27. 50	13. 25	·1364					
9. 28	27. 35	13. 42	·1367					
9. 39	25. 10	14. 20	·1365					
9. 53	27. 50	15. 44	·1364					
9. 58	27. 10	16. 6	·1369					
10. 9	23. 30	16. 25	·1372					
10. 17	22. 30	16. 44	·1369					
10. 36	26. 30	18. 36	·1378					
10. 47	26. 20	19. 14	·1372					
11. 11	25. 30	19. 52	·1369					
11. 41	27. 30	20. 20	·1364					
12. 11	28. 0	21. 12	·1362					
13. 11	29. 45	21. 43	·1366					
13. 42:	31. 35	22. 19	·1364					
14. 15	29. 15	23. 59	·1370					
14. 38	30. 5							
15. 8	30. 45							
15. 26	32. 5							
15. 41	34. 0							
15. 53	32. 55							
15. 58	32. 55							
16. 4	33. 15							
16. 25	31. 55							
16. 43	29. 40							
17. 46	32. 10							
18. 39	32. 30							
19. 11	31. 25							
20. 30	32. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 15								
h m	° ′ ″	h m		h m		h m	°	°
20. 41	20. 32. 30							
20. 58	31. 35							
21. 24	31. 50							
	***							
22. 19	31. 50							
22. 53	33. 40							
23. 23	34. 5							
23. 59	35. 30							
Jan. 16		Jan. 16		Jan. 16		Jan. 16		
0. 0	20. 35. 30	0. 0	·1370	0. 0	·03407	1. 0	59 ·5	59 ·8
0. 33	38. 10	0. 35	·1374	9. 11	·03487	3. 0	59 ·8	60 ·4
	***	0. 55	·1373	13. 27	·03488	9. 0	59 ·8	59 ·4
0. 47	38. 0	1. 11	·1366	23. 59	·03454	21. 0	59 ·8	60 ·0
0. 59	38. 30	1. 29	·1370			22. 0	59 ·8	59 ·0
1. 12	36. 5	1. 57	·1374			23. 0	59 ·1	58 ·3
1. 26	36. 15	2. 24	·1370					
1. 39	37. 35	2. 57	·1374					
1. 44	37. 30	3. 12	·1372					
2. 8	38. 15	3. 20	·1374					
2. 23	36. 5	3. 27	·1372					
2. 32	35. 30	3. 46	·1375					
3. 6	36. 10	4. 36	·1368					
3. 53	34. 50	5. 14	·1374					
4. 10	35. 15	5. 42	·1368					
4. 35	34. 15	6. 25	·1372					
4. 44	33. 35	7. 32	·1368					
5. 1	33. 30	12. 28	·1367					
5. 33	35. 30	13. 10	·1365					
5. 39	34. 50	13. 57	·1368					
6. 6	34. 0	14. 56	·1365					
6. 39	34. 15	16. 42	·1368					
7. 1	33. 30	18. 41	·1366					
7. 18	33. 55	20. 24	·1372					
7. 57	32. 45	21. 40	·1367					
8. 53	31. 55	21. 55	·1369					
8. 59	32. 30	22. 44	·1366					
9. 25	32. 0	22. 54	·1367					
9. 39	32. 30	23. 16	·1361					
10. 26	32. 15	23. 41	·1364					
13. 4	33. 15	23. 59	·1356					
13. 23	34. 40							
14. 14	32. 55							
14. 42	33. 25							
14. 58	32. 0							
15. 13	32. 30							
15. 37	31. 55							
15. 51	32. 30							
16. 4	32. 10							
16. 12	32. 40							
16. 23	32. 10							
16. 45:	33. 30							
17. 10	32. 30							
17. 25	33. 10							
18. 12	32. 0							
18. 33	32. 30							
19. 17	32. 30							
19. 39	31. 40							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 16								
h m	° ′ ″	h m		h m		h m	°	°
21. 39	20. 32. 5							
21. 55	33. 50							
22. 9	34. 5							
22. 41	33. 0							
22. 53	34. 0							
23. 10	34. 40							
23. 24	34. 40							
23. 29	34. 0							
	***							
23. 59	36. 45							
Jan. 17		Jan. 17		Jan. 17		Jan. 17		
0. 0	20. 36. 45	0. 0	·1356	0. 0	·03454	0. 0	59 ·8	59 ·0
0. 7	36. 30	0. 29	·1354	2. 43	·03476	1. 0	59 ·8	59 ·0
0. 13	37. 15	1. 11	·1371	7. 23	·03478	2. 0	59 ·8	59 ·0
0. 32	35. 40	1. 38	·1377	7. 58	·03484	3. 0	59 ·8	59 ·0
0. 42	35. 25	1. 56	·1372	10. 41	·03497	9. 0	59 ·8	60 ·0
1. 3	36. 35	2. 20	·1375	11. 55	·03513	21. 0	61 ·4	62 ·0
1. 10	36. 30	3. 44	·1372	12. 13	·03506	22. 0	61 ·1	62 ·0
1. 44	37. 45	5. 56	·1373	14. 40	·03510	23. 0	60 ·6	61 ·5
2. 12	36. 0	7. 12	·1369	15. 24	·03504			
2. 43	35. 40	7. 36	·1361	16. 11	·03523			
3. 12	33. 20	8. 3	·1363	16. 56	·03518			
3. 21	32. 55	8. 14	·1362	18. 26	·03537			
3. 29	33. 30	8. 40	·1364	21. 22	·03543			
3. 54	33. 10	9. 57	·1368	22. 44	·03557			
6. 34	34. 15	10. 14	·1365	23. 59	·03540			
7. 14	32. 55	10. 26	·1367					
7. 32	30. 30	11. 5	·1369					
7. 41	30. 20	11. 26	·1362					
7. 47	31. 0	11. 57	·1377					
7. 54	31. 0	12. 23	·1368					
8. 13	32. 20	12. 44	·1364					
8. 42	32. 50	13. 14	·1367					
8. 58	31. 25	13. 26	·1365					
9. 4	32. 10	14. 51	·1368					
9. 16	32. 30	15. 12	·1377					
9. 34	31. 20	15. 26	·1366					
9. 49	32. 10	15. 53	·1359					
10. 26	30. 20	16. 55	·1368					
10. 39	30. 35	17. 29	·1366					
10. 50	30. 25	18. 49	·1367					
11. 10	30. 40	20. 58	·1369					
11. 22	27. 0	21. 40	·1367					
12. 17	30. 50	22. 10	·1363					
12. 30	30. 0	23. 59	·1366					
12. 39	30. 40							
12. 42	30. 30							
12. 48	32. 20							
12. 55	32. 10							
13. 9	30. 55							
13. 22	31. 20							
13. 54	30. 5							
14. 10	30. 45							
14. 27	29. 30							
14. 42	31. 25							
15. 29	28. 30							
15. 56	31. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 17								
h m	° ′ ″	h m		h m		h m	°	°
16. 8	20. 34. 30							
16. 25	36. 15							
16. 53	33. 50							
17. 10	31. 20							
17. 23	31. 45							
17. 28	31. 25							
17. 48	32. 50							
17. 55	31. 45							
18. 32	33. 20							
18. 40	32. 15							
18. 44	32. 15							
18. 57	31. 40							
19. 13	32. 5							
19. 59	31. 25							
20. 17	31. 35							
20. 25	31. 25							
20. 44	32. 10							
21. 46	34. 5							
22. 0	33. 15							
22. 27	33. 30							
22. 54	34. 45							
23. 16	35. 0							
23. 32	36. 0							
23. 47	35. 55							
23. 59	36. 40							
Jan. 18		Jan. 18		Jan. 18		Jan. 18		
0. 0	20. 36. 40	0. 0	·1366	0. 0	·03540	0. 0	60 ·6	61 ·0
0. 11	36. 40	0. 33	·1372	1. 19	·03531	1. 0	60 ·6	61 ·0
0. 46	37. 55	0. 54	·1370	10. 5	·03517	2. 30	60 ·1	60 ·0
0. 59	37. 5	7. 26	·1369	16. 41	·03538	3. 0	60 ·1	59 ·9
1. 33	36. 15	8. 12	·1366	23. 59	·03540	9. 0	60 ·1	60 ·0
1. 40	36. 50	8. 40	·1363			21. 0	60 ·9	60 ·7
2. 25	35. 20	8. 56	·1367					
2. 38	35. 20	9. 29	·1363					
3. 23	34. 10	10. 25	·1365					
3. 43	34. 20	10. 57	·1364					
4. 4	33. 55	11. 26	·1365					
4. 57	34. 5	12. 24	·1364					
5. 14	33. 50	13. 3	·1366					
5. 57	33. 45	13. 42	·1361					
6. 9	33. 5	19. 15	·1367					
6. 38	33. 20	23. 59	·1361					
7. 33	32. 40							
8. 23	32. 45							
8. 41 ⁚	31. 30							
9. 10	32. 5							
9. 19	31. 30							
9. 33	31. 20							
11. 0	32. 10							
12. 44	30. 55							
12. 53	31. 20							
13. 6	30. 50							
13. 12	31. 0							
13. 21	30. 35							
13. 27	31. 40							
13. 35	31. 30							
13. 41	30. 35							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁚ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan.18								
h m	° ′ ″	h m		h m		h m	°	°
13. 49	20. 30. 45							
14. 0	30. 5							
14. 29	31. 15							
14. 37	31. 0							
14. 57	32. 0							
15. 9	31. 10							
15. 28	32. 5							
15. 42	32. 15							
16. 26	31. 15							
16. 56	32. 0							
17. 26:	32. 40							
17. 58	31. 55							
18. 14	32. 20							
19. 18	32. 0							
20. 40	31. 15							
21. 51	31. 25							
22. 12	32. 10							
22. 30	32. 0							
23. 0	33. 30							
23. 12	33. 20							
23. 35	34. 30							
23. 59	34. 30							
Jan.19		Jan.19		Jan.19		Jan.19		
0. 0	20. 34. 30	0. 0	·1361	0. 0	·03540	1. 0	61 ·6	61 ·0
1. 40	36. 50	0. 36	·1359	3. 35	·03546	3. 0	61 ·0	60 ·4
1. 54	36. 20	1. 30	·1364	7. 55	·03522	9. 0	60 ·6	60 ·1
2. 23:	34. 40	2. 15	·1363	10. 22	·03528	21. 0	59 ·8	59 ·0
2. 57	34. 0	3. 28	·1368	20. 22	·03456			
3. 8	33. 25	5. 54	·1367	23. 59	·03443			
3. 20	33. 0	6. 25	·1371					
3. 34	33. 30	7. 27	·1364					
6. 7	33. 0	7. 44	·1366					
7. 23:	32. 50	8. 24	·1352					
7. 43	30. 50	8. 39	·1354					
8. 9	33. 35	9. 0	·1348					
8. 25	31. 30	9. 25	·1352					
	***	10. 9	·1353					
8. 57	31. 30	10. 19	·1357					
9. 21	30. 10	10. 44	·1354					
9. 33	31. 0	11. 14	·1364					
9. 47	30. 45	11. 52	·1353					
10. 0	30. 30	13. 43	·1364					
10. 23	30. 40	14. 8	·1362					
10. 34	29. 30	15. 58	·1363					
10. 43	29. 10	16. 20	·1365					
10. 54	29. 40	19. 25	·1371					
11. 9	31. 30	21. 54	·1363					
11. 26	30. 40	23. 59	·1366					
11. 42	28. 50							
12. 34	30. 15							
12. 51	31. 10							
12. 56	30. 50							
13. 9	31. 20							
13. 55	30. 40							
14. 14	31. 40							
14. 29	30. 40							
15. 11	31. 45							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan.19								
h m	° ′ ″	h m		h m		h m	°	°
15. 23	20. 31. 25							
15. 47	32. 15							
16. 39	32. 0							
17. 4	32. 45							
17. 26	32. 15							
17. 47	32. 50							
18. 13	32. 30							
18. 31	32. 55							
	***							
20. 24	31. 30							
21. 56	32. 0							
22. 9	33. 10							
22. 34	32. 30							
23. 30	34. 35							
23. 49	34. 50							
23. 59	35. 55							
Jan.20		Jan.20		Jan.20		Jan.20		
0. 0	20. 35. 55	0. 0	·1366	0. 0	·03443	1. 0	59 ·8	59 ·0
0. 30	36. 50	0. 30	·1371	1. 11	·03440	3. 0	59 ·8	59 ·2
1. 8	35. 30	1. 29	·1378	4. 25	·03460	9. 0	59 ·8	60 ·0
1. 42	35. 50	4. 26	·1376	8. 54	·03458	22. 0	59 ·6	59 ·0
2. 23	34. 50	5. 7	·1378	9. 57	·03477			
3. 29	33. 55	6. 9	·1375	10. 45	·03475			
4. 15	34. 10	7. 23	·1378	12. 5	·03497			
4. 56	33. 55	7. 41	·1376	12. 11	·03482			
5. 12	34. 25	7. 56	·1382	12. 14	·03487			
7. 58	32. 40	8. 36	·1374	13. 11	·03400			
8. 15	33. 15	8. 45	·1376	13. 23	·03417			
8. 28	32. 30	8. 53	·1372	13. 44	·03409			
8. 53	32. 10	9. 0	·1369	14. 0	·03437			
9. 0	31. 30	9. 40	·1367	14. 19	·03442			
9. 9	32. 40	9. 55	·1362	14. 35	·03426			
9. 26	33. 20	10. 25	·1372	14. 54	·03425			
10. 3	31. 0	11. 0	·1370	15. 41	·03460			
10. 23	31. 10	11. 16	·1373	15. 54	·03456			
11. 8	30. 20	11. 45	·1372	17. 43	·03476			
11. 33	32. 30	11. 56	·1366	17. 53	·03460			
12. 26	24. 45	12. 4	·1372	18. 5	·03472			
12. 39	27. 30	12. 11	·1368		***			
12. 42	25. 50	12. 20	·1389	19. 11	·03444			
12. 50	26. 40	12. 25	·1383	19. 16	·03457			
12. 56	22. 10	12. 34	·1394	20. 15	·03440			
13. 15	19. 0	12. 46	·1380	21. 11	·03460			
13. 36	22. 25	12. 57	·1364	21. 59	·03440			
13. 48	23. 50	13. 12	·1355	22. 56	·03448			
13. 56	23. 30	13. 15	·1359	23. 59	·03468			
14. 13	28. 5	13. 20	·1356					
14. 21	28. 25	13. 39	·1366					
14. 27	32. 25	13. 54	·1354					
14. 32	25. 25	14. 5	·1333					
14. 57	20. 10	14. 14	·1350					
15. 43	33. 20	14. 16	·1348					
15. 52	33. 30	14. 30	·1363					
15. 57	31. 55	14. 41	·1346					
16. 3	32. 0	14. 55	·1354					
16. 11	31. 20	15. 10	·1349					
16. 16	32. 30	15. 19	·1356					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Jan. 20		Jan. 20						
h m	° ′ ″	h m		h m		h m	°	°
16. 34	20. 33. 35	15. 29	·1353					
16. 55	31. 50	15. 55	·1361					
17. 4	32. 40	16. 9	·1350					
17. 11	31. 35	16. 14	·1359					
17. 24	32. 20	16. 23	·1355					
17. 33	32. 20	16. 42	·1357					
17. 43	33. 50	16. 45	·1354					
17. 46	30. 15	17. 12	·1364					
17. 56	30. 30	17. 15	·1360					
18. 1	32. 50	17. 30	·1366					
18. 6	31. 55		***					
18. 11	30. 50	17. 43	·1364					
	***	17. 56	·1372					
18. 29	35. 0	18. 0	·1359					
18. 37	35. 0	18. 12	·1370					
18. 42	32. 55	18. 14	·1364					
18. 52	35. 30	18. 32	·1379					
18. 59	36. 20		***					
19. 8	35. 10	19. 13	·1365					
19. 24	39. 40	19. 25	·1371					
19. 40	38. 20	19. 42	·1362					
	***	19. 45	·1367					
19. 57	38. 30	19. 50	·1363					
20. 6	40. 20	19. 55	·1367					
20. 22	40. 55	19. 59	·1359					
20. 33	43. 40	20. 1	·1361					
20. 37	42. 30	20. 12	·1344					
20. 41	43. 30	20. 15	·1346					
20. 52	41. 10	20. 24	·1340					
21. 11	42. 45	20. 30	·1351					
21. 39	41. 55	20. 38	·1341					
21. 43	40. 0	20. 44	·1346					
21. 57	39. 30	20. 50	·1339					
22. 21	40. 30	20. 55	·1343					
22. 39	38. 40	20. 59	·1341					
22. 51	39. 0	21. 14	·1358					
23. 9	41. 0	21. 18	·1356					
23. 14	40. 40	21. 36	·1364					
23. 23	39. 30	21. 48	·1359					
23. 32	39. 15	22. 28	·1353					
23. 39	38. 20	22. 44	·1356					
23. 42	38. 30	23. 26	·1355					
23. 51	37. 5	23. 59	·1360					
23. 59	36. 55							
Jan. 21		Jan. 21		Jan. 21		Jan. 21		
0. 0	20. 36. 55	0. 0	·1360	0. 0	·03468	1. 0	59·8	59·0
	***	0. 13	·1363	0. 26	·03462	9. 0	59·8	59·0
0. 23	38. 5	0. 30	·1360	3. 10	·03466	21. 0	59·6	59·0
0. 27	38. 5	0. 44	·1362	3. 57	·03482			
0. 33	37. 0	1. 15	·1359	4. 28	·03467			
0. 44	37. 50	2. 40	·1366	5. 12	·03506			
1. 59	36. 30	3. 23	·1364	6. 11	·03511			
2. 23	35. 40	3. 49	·1368	7. 13	·03482			
2. 59	35. 20	4. 0	·1364	8. 9	·03477			
3. 10	34. 50	4. 10	·1363	8. 26	·03482			
3. 52	35. 20	4. 45	·1350	9. 28	·03447			
4. 17:	37. 0	5. 25	·1351	10. 30	·03444			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Jan. 21		Jan. 21		Jan. 21				
h m	° ′ ″	h m		h m		h m	°	°
4. 39	20. 33. 55	5. 44	·1356	10. 41	·03466			
5. 6	22. 30	5. 55	·1360	11. 4	·03387			
5. 14	22. 0	6. 12	·1356	11. 15	·03390			
5. 28	19. 15	6. 26	·1359	11. 38	·03403			
5. 49	22. 30	6. 44	·1366	12. 26	·03423			
6. 12	29. 0	7. 8	·1365	23. 59	·03418			
6. 23	31. 45	7. 25	·1361					
6. 28	31. 25	7. 41	·1362					
6. 37	32. 30	8. 11	·1356					
6. 53	32. 55	8. 21	·1363					
7. 26	30. 45	8. 52	·1368					
7. 43	30. 55	9. 18	·1363					
8. 5	26. 0	9. 41	·1373					
8. 27	31. 0	10. 35	·1344					
8. 41	31. 35	10. 42	·1387					
8. 56	30. 45	10. 49	·1396					
9. 5	30. 55	11. 5	·1363					
9. 24	20. 45	11. 21	·1356					
9. 49	25. 50	11. 40	·1367					
9. 56	25. 50	11. 57	·1364					
10. 11	27. 20	12. 11	·1358					
10. 15	26. 50	13. 35	·1364					
10. 43	40. 0	14. 53	·1363					
11. 2	33. 50	16. 39	·1370					
11. 17	25. 20	16. 56	·1368					
11. 52	29. 20	17. 21	·1373					
11. 58	29. 20	17. 44	·1369					
12. 24	32. 20	18. 25	·1376					
13. 5	33. 0	19. 0	·1372					
13. 11	32. 45	19. 19	·1374					
14. 28	33. 30	20. 21	·1367					
14. 58	32. 45	23. 41	·1359					
15. 21	32. 55	23. 59	·1362					
15. 53	32. 40							
16. 11	32. 45							
16. 29	34. 30							
16. 43	34. 30							
16. 59	33. 30							
17. 25	33. 20							
17. 38	33. 5							
17. 51	34. 0							
18. 24	33. 0							
18. 56	33. 20							
19. 30	32. 25							
19. 44	33. 0							
20. 11	31. 50							
20. 36	32. 20							
21. 2	32. 35							
22. 58	35. 20							
23. 59	35. 55							
Jan. 22		Jan. 22		Jan. 22		Jan. 22		
0. 0	20. 35. 55	0. 0	·1362	0. 0	·03418	1. 0	59·8	60·4
0. 15	35. 55	0. 43	·1364	2. 56	·03444	3. 0	59·8	59·8
0. 44	37. 30	2. 9	·1367	5. 36	·03440	9. 0	59·8	60·0
1. 28	37. 10	2. 59	·1365	8. 37	·03442	21. 0	58·3	58·0
2. 3	35. 50	3. 20	·1358	21. 5	·03372			
2. 32	35. 30	3. 52	·1367	21. 54	·03358			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 22		Jan. 22		Jan. 22				
h m	° ′ ″	h m		h m		h m	°	°
3. 3	20. 34. 20	4. 14	·1366	23. 59	·03354			
3. 8	32. 50	4. 39	·1370					
3. 17	32. 40	4. 58	·1371					
3. 38	31. 0	5. 11	·1373					
4. 2	32. 20	5. 49	·1370					
4. 17	32. 10	9. 24	·1368					
4. 46	34. 25	9. 42	·1369					
7. 42	33. 20	11. 27	·1366					
7. 57	33. 50	13. 2	·1365					
9. 50	32. 50	13. 56	·1366					
10. 38	32. 50	14. 15	·1369					
10. 44	32. 25	14. 41	·1366					
13. 59	33. 55	17. 56	·1369					
14. 16	32. 55	18. 20	·1372					
14. 39	33. 50	18. 40	·1369					
14. 58	32. 40	20. 44	·1369					
15. 36	33. 30	23. 11	·1364					
15. 43	32. 40	23. 59	·1365					
15. 56	32. 10							
16. 19	32. 45							
20. 58	32. 10							
22. 38	34. 40							
23. 59	36. 20							
Jan. 23		Jan. 23		Jan. 23		Jan. 23		
0. 0	20. 36. 20	0. 0	·1365	0. 0	·03354	1. 0	58·3	58·9
2. 37	35. 10	0. 36	·1371	7. 10	·03377	3. 0	58·3	58·8
3. 8	34. 40	1. 12	·1372	8. 11	·03387	9. 0	58·3	58·0
3. 26	33. 45	1. 20	·1369	18. 57	·03297	21. 0	56·8	56·0
4. 24	34. 30	5. 18	·1373	23. 59	·03240	22. 0	56·9	56·1
4. 38	34. 5	5. 35	·1376			23. 0	56·9	56·1
4. 51	34. 30	5. 45	·1374					
5. 38	34. 30	6. 26	·1372					
5. 57	34. 0	6. 48	·1368					
6. 25	34. 30	7. 6	·1360					
6. 43	33. 50	7. 19	·1363					
7. 2	30. 10	7. 49	·1370					
7. 8	30. 20	8. 41	·1366					
7. 23	25. 35	9. 0	·1367					
7. 27	25. 20	9. 13	·1363					
7. 37	26. 0	9. 32	·1365					
8. 3	31. 45	9. 44	·1370					
8. 12	30. 10	9. 56	·1372					
8. 33	29. 25	10. 12	·1369					
8. 55	29. 30	10. 24	·1372					
9. 13	31. 25	10. 49	·1370					
9. 23	30. 55	11. 11	·1373					
9. 37	31. 30	13. 22	·1370					
9. 42	31. 0	13. 40	·1372					
10. 46	32. 40	15. 55	·1373					
11. 6	32. 25	17. 9	·1372					
11. 23	32. 50	18. 41	·1376					
11. 46	32. 30	23. 59	·1370					
12. 56	33. 10							
15. 29	33. 10							
15. 33	33. 50							
15. 41	32. 20							
16. 4	33. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 23								
h m	° ′ ″	h m		h m		h m	°	°
16. 28	20. 32. 45							
17. 30	33. 0							
17. 40	32. 30							
17. 54	33. 0							
20. 32	32. 30							
21. 8	32. 40							
23. 59	36. 30							
Jan. 24		Jan. 24		Jan. 24		Jan. 24		
0. 0	20. 36. 30	0. 0	·1370	0. 0	·03240	0. 0	56·0	56·1
0. 9	36. 10	1. 15	·1372	2. 19	·03232	1. 0	56·6	56·0
0. 39	37. 20	1. 53	·1378	9. 37	·03370	2. 0	56·0	56·1
1. 11	37. 0	2. 44	·1375	13. 32	·03319	3. 0	57·3	55·5
1. 28	36. 25	3. 2	·1379	23. 59	·03298	9. 0	59·8	60·5
1. 56	36. 55	3. 25	·1377			21. 0	57·1	56·7
3. 7	35. 0	4. 15	·1376			22. 0	57·8	57·4
4. 30	34. 5	6. 29	·1375			23. 0	58·2	58·3
	***	7. 25	·1374					
5. 23	34. 0	7. 55	·1370					
8. 3	33. 30	9. 57	·1372					
8. 17	33. 0	12. 55	·1370					
11. 27	32. 20	13. 16	·1372					
12. 55	33. 5	13. 41	·1370					
13. 7	33. 15	15. 29	·1369					
13. 23	32. 30	16. 27	·1375					
14. 2	32. 55	18. 12	·1377					
14. 56	32. 50	18. 39	·1376					
15. 30	34. 0	19. 12	·1380					
16. 10	33. 40	19. 55	·1376					
16. 26	32. 55	20. 15	·1379					
16. 56	33. 0	21. 12	·1373					
17. 46	32. 25	21. 30	·1368					
18. 14	32. 30	23. 4	·1360					
18. 40	32. 30	23. 42	·1361					
18. 48	32. 40	23. 59	·1364					
19. 10	32. 5							
19. 35	32. 45							
19. 55	32. 30							
21. 25	32. 5							
22. 43	35. 10							
23. 59	36. 45							
Jan. 25		Jan. 25		Jan. 25		Jan. 25		
0. 0	20. 36. 45	0. 0	·1364	0. 0	·03298	0. 0	58·2	58·0
1. 29	39. 25	0. 10	·1368	1. 59	·03330	1. 0	58·2	57·9
1. 38	38. 40	0. 55	·1374	5. 57	·03306	2. 0	58·4	58·9
2. 11	38. 0	1. 29	·1369	8. 28	·03324	3. 0	58·2	58·6
2. 18	37. 5	1. 42	·1373	9. 2	·03340	9. 0	58·0	58·4
2. 33	36. 20	1. 57	·1370	14. 6	·03308	21. 0	57·8	57·2
3. 50	34. 50	2. 48	·1376	20. 24	·03297			
4. 27	34. 50	4. 54	·1378	22. 23	·03283			
4. 55	34. 10	5. 41	·1373	23. 59	·03306			
5. 15	34. 35	5. 53	·1381					
5. 41	34. 0	6. 0	·1376					
5. 47	32. 5	6. 22	·1378					
6. 3	32. 5	6. 27	·1374					
6. 26	32. 50	6. 41	·1379					
6. 30	34. 10	7. 25	·1372					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 25		Jan. 25						
h m	° ′ ″	h m		h m		h m	°	
6. 39	20. 33. 25	7. 56	·1370					
7. 55	33. 30	8. 34	·1358					
7. 58	32. 55	8. 45	·1364					
8. 6	33. 15	8. 57	·1367					
8. 38	29. 55	9. 15	·1360					
8. 57	31. 20	9. 52	·1367					
9. 22	26. 40	10. 13	·1372					
9. 43	30. 50	10. 36	·1368					
9. 58	31. 30	10. 57	·1369					
10. 10	32. 35	11. 15	·1367					
10. 27	31. 50	11. 42	·1368					
10. 43	32. 5	12. 36	·1365					
11. 23	31. 35	12. 56	·1372					
11. 43	32. 10	13. 43	·1371					
12. 39	32. 30	14. 0	·1368					
12. 48	32. 50	17. 4	·1369					
13. 21	32. 30		***					
13. 29	32. 0	20. 40	·1373					
13. 38	32. 20	21. 6	·1368					
14. 6	31. 25	21. 13	·1371					
14. 14	32. 5	21. 43	·1364					
14. 32	32. 5	22. 12	·1366					
14. 40	32. 40	23. 5	·1360					
14. 46	32. 0	23. 59	·1363					
15. 23	32. 30							
16. 36	32. 15							
16. 51	31. 35							
17. 11	31. 50							
17. 30	31. 35							
17. 44	32. 5							
18. 3	31. 15							
18. 16	32. 35							
18. 40	31. 45							
	***							
19. 43	31. 40							
19. 58	31. 10							
20. 54	31. 40							
	***							
21. 38	32. 20							
21. 43	33. 25							
21. 51	33. 20							
22. 9	34. 35							
22. 40	34. 55							
	***							
23. 17	34. 40							
23. 30	35. 20							
23. 39	35. 10							
23. 59	36. 30							
Jan. 26		Jan. 26		Jan. 26		Jan. 26		
0. 0	20. 36. 30	0. 0	·1363	0. 0	·03306	1. 0	58 ·8	58 ·5
1. 12	37. 45	0. 40	·1366	2. 6	·03327	3. 0	58 ·1	57 ·7
1. 23	37. 15	1. 11	·1372	4. 45	·03306	9. 0	57 ·8	57 ·4
	***	1. 47	·1377	7. 56	·03298	21. 0	60 ·6	62 ·5
2. 11	38. 15	2. 57	·1370	10. 26	·03317			
2. 27	36. 45	3. 14	·1375	13. 45	·03383			
3. 1	35. 0	4. 20	·1377	15. 6	·03394			
3. 22	34. 30	4. 56	·1374	21. 17	·03477			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Jan. 26		Jan. 26		Jan. 26				
h m	° ′ ″	h m		h m		h m	°	°
4. 39	20. 35. 5	5. 26	·1377	23. 59	·03428			
4. 56	35. 35	5. 42	·1374					
5. 12	34. 30	6. 56	·1378					
5. 22	35. 0	7. 51	·1375					
5. 28	34. 15	8. 13	·1372					
5. 46	34. 40	8. 26	·1367					
5. 58	34. 20	8. 38	·1369					
6. 6	34. 40	8. 43	·1367					
6. 19	34. 5	9. 11	·1364					
6. 40	34. 50	9. 34	·1369					
6. 53	34. 25	9. 56	·1366					
7. 1	34. 40	10. 19	·1372					
7. 44	34. 0	10. 40	·1365					
8. 10	34. 10	10. 53	·1360					
8. 28	32. 15	11. 0	·1363					
9. 11	22. 5	11. 11	·1361					
9. 45	29. 25	11. 30	·1364					
10. 4	29. 50	11. 49	·1367					
10. 11	30. 35	12. 10	·1360					
10. 15	30. 10	12. 43	·1362					
10. 28	30. 30	12. 55	·1366					
10. 45	30. 30	13. 18	·1360					
10. 56	31. 10	13. 36	·1356					
11. 8	31. 10	13. 59	·1367					
11. 16	30. 50	14. 18	·1371					
11. 24	30. 50	14. 45	·1363					
11. 51	29. 40	14. 57	·1366					
12. 9	30. 40	15. 10	·1363					
12. 23	30. 10	15. 23	·1365					
12. 32	29. 0	15. 34	·1361					
12. 43	28. 30	15. 41	·1364					
13. 21	31. 10	16. 12	·1361					
13. 30	29. 55	16. 36	·1366					
13. 49	32. 0	17. 18	·1362					
14. 8	31. 30	18. 41	·1366					
14. 21	33. 10	19. 19	·1367					
14. 39	30. 40	20. 25	·1363					
14. 42	31. 10	20. 41	·1365					
14. 53	29. 40	21. 14	·1360					
15. 11	29. 10	21. 53	·1365					
15. 35	29. 50	22. 13	·1358					
15. 43	31. 40	22. 47	·1363					
15. 58	31. 0	23. 59	·1353					
16. 11	33. 10							
16. 27	32. 55							
16. 42	30. 40							
17. 14	31. 30							
17. 52	33. 10							
18. 20	32. 5							
18. 55	32. 5							
20. 33	31. 30							
21. 8	32. 5							
21. 24	31. 40							
21. 34	32. 30							
21. 42	32. 15							
21. 56	33. 40							
22. 3	33. 50							
22. 11	33. 10							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁏ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 26								
h m	° ′ ″	h m		h m		h m	°	°
22. 34	20. 34. 0							
22. 56	36. 50							
23. 6	36. 10							
23. 30	37. 40							
23. 41	36. 20							
23. 59	37. 0							
Jan. 27		Jan. 27		Jan. 27		Jan. 27		
0. 0	20. 37. 0	0. 0	·1353	0. 0	·03428	1. 0	59 ·3	59 ·8
0. 29	39. 20	0. 15	·1354	1. 22	·03408	3. 0	58 ·8	59 ·1
0. 38	39. 45	0. 27	·1360	1. 46	·03416	9. 0	58 ·3	59 ·0
0. 50	39. 5	0. 56	·1362	2. 48	·03405	22. 0	58 ·2	57 ·4
1. 26	38. 10	1. 7	·1360	8. 51	·03394			
1. 51	39. 0	2. 11	·1368	11. 44	·03363			
2. 11	38. 50	2. 26	·1366	13. 43	·03362			
3. 14	35. 45	4. 26	·1371	14. 22	·03340			
3. 38	34. 30	8. 35	·1372	14. 43	·03336			
3. 46	34. 30	8. 56	·1374	15. 9	·03341			
4. 11	33. 45	9. 20	·1370	15. 36	·03320			
4. 58	34. 10	9. 33	·1372	16. 22	·03326			
6. 15	33. 15	9. 43	·1369	16. 55	·03320			
7. 51	33. 0	10. 11	·1374	21. 14	·03335			
8. 23	32. 25	10. 19	·1372	23. 45	·03313			
8. 41	30. 0	10. 54	·1374	23. 59	·03320			
9. 15	31. 25	11. 12	·1380					
9. 26	32. 35	11. 55	·1364					
9. 39	32. 5	12. 20	·1372					
9. 54	32. 30	12. 41	·1368					
10. 10	30. 40	13. 10	·1372					
10. 23	30. 5	13. 40	·1371					
10. 27	30. 15	13. 55	·1378					
10. 53	28. 10	14. 28	·1374					
11. 7	28. 55	14. 42	·1376					
11. 48	29. 15	14. 53	·1374					
12. 24	33. 40	15. 18	·1391					
12. 34	32. 10	15. 40	·1377					
12. 41	32. 25	16. 12	·1372					
12. 55	33. 55	16. 24	·1375					
13. 11	31. 0	16. 54	·1373					
13. 26	31. 0	17. 10	·1368					
13. 39	32. 40	17. 38	·1367					
13. 51	31. 40	18. 18	·1372					
14. 11	27. 0	19. 21	·1375					
14. 20	26. 50		***					
14. 33	23. 10	20. 12	·1372					
15. 7	29. 10		***					
15. 31:	24. 30	20. 54	·1375					
15. 43	24. 20	21. 12	·1371					
15. 53	25. 20	22. 4	·1373					
16. 0	25. 10	22. 44	·1366					
16. 5	27. 30	23. 30	·1370					
16. 14	28. 25	23. 49	·1366					
16. 32	27. 30	23. 59	·1369					
17. 26	31. 10							
17. 37	33. 5							
17. 49	33. 5							
18. 9	31. 50							
18. 21	32. 30							
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 27								
h m	° ′ ″	h m		h m		h m	°	°
21. 4	20. 32. 25							
21. 15	33. 5							
21. 24	32. 10							
21. 39	33. 20							
21. 53	33. 50							
22. 3	34. 50							
22. 26	34. 10							
23. 32	37. 20							
23. 47	36. 55							
23. 59	37. 55							
Jan. 28		Jan. 28		Jan. 28		Jan. 28		
0. 0	20. 37. 55	0. 0	·1369	0. 0	·03320	0. 0	58 ·6	58 ·0
0. 11	38. 20	0. 29	·1368	3. 52	·03371	8. 0	59 ·2	59 ·3
0. 36	37. 10	0. 55	·1369	10. 24	·03374	21. 0	60 ·8	61 ·0
0. 45	37. 30	1. 9	·1372	12. 34	·03408			
1. 10	37. 0	1. 12	·1376	13. 43	·03394			
1. 25:	38. 55	1. 25	·1370	14. 41	·03402			
1. 40	37. 35	1. 45	·1371	18. 12	·03442			
1. 56	37. 0	2. 0	·1377	21. 6	·03446			
	***	2. 12	·1374	23. 59	·03407			
2. 11	38. 20	3. 0	·1371					
3. 12	38. 15	3. 42	·1366					
3. 53	37. 50	4. 10	·1368					
4. 9	36. 40	4. 24	·1364					
4. 40	37. 10	4. 52	·1372					
4. 55	35. 20	6. 26	·1372					
5. 28	36. 5	6. 41	·1368					
5. 46	35. 0	6. 55	·1370					
6. 26	34. 40	7. 12	·1368					
6. 40	35. 10	7. 25	·1370					
6. 56	34. 0	7. 40	·1367					
7. 25	34. 20	7. 56	·1375					
7. 33	33. 40	8. 22	·1372					
7. 53	30. 30	8. 30	·1375					
8. 42	33. 20	8. 44	·1374					
8. 53	34. 10	8. 56	·1368					
9. 0	33. 0	9. 25	·1377					
9. 12	30. 30	10. 4	·1376					
9. 26	31. 30	10. 12	·1379					
9. 43	28. 30	10. 25	·1368					
9. 59	28. 30	10. 41	·1374					
10. 12	30. 30	10. 57	·1369					
10. 26	29. 20	11. 10	·1365					
10. 37	29. 40	11. 21	·1367					
10. 51	29. 35	11. 40	·1365					
10. 54	30. 30	12. 27	·1370					
11. 0	30. 10	12. 57	·1375					
11. 23	31. 15	13. 16	·1382					
11. 41	30. 20	13. 27	·1376					
11. 58	31. 10	13. 42	·1381					
12. 7	30. 55	14. 12	·1372					
12. 14	32. 30	14. 26	·1367					
12. 26	34. 20	14. 46	·1364					
12. 35	34. 10	15. 40	·1367					
12. 55	31. 25	17. 25	·1366					
13. 7	32. 10	19. 29	·1373					
13. 26	31. 0	20. 30	·1366					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 28		Jan. 28						
h m	° ′ ″	h m		h m		h m	°	°
13. 42	20. 31. 0	21. 44	·1367					
14. 4	29. 25	22. 14	·1365					
14. 23	31. 15	23. 0	·1367					
14. 46	32. 40	23. 59	·1364					
15. 18	31. 50							
15. 27	30. 55							
16. 0	31. 35							
16. 23	30. 50							
16. 39	31. 45							
17. 24	31. 5							
17. 33	31. 45							
17. 52	31. 15							
18. 55	31. 30							
19. 10	32. 10							
19. 21	31. 55							
19. 39	32. 40							
20. 50	30. 10							
20. 58	30. 50							
22. 13	32. 50							
22. 27	33. 55							
23. 34	35. 50							
23. 54	35. 10							
23. 59	36. 0							
Jan. 29		Jan. 29		Jan. 29		Jan. 29		
0. 0	20. 36. 0	0. 0	·1364	0. 0	·03407	1. 0	59 ·4	58 ·8
0. 13	37. 30	0. 19	·1368	0. 54	·03396	3. 0	58 ·8	58 ·0
0. 26	37. 5	1. 10	·1373	8. 44	·03357	9. 0	58 ·8	58 ·0
0. 41	37. 30	1. 19	·1370	15. 55	·03385	21. 0	58 ·8	58 ·7
2. 9	36. 30	3. 35	·1372	19. 41	·03380			
2. 51	35. 15	3. 43	·1369	23. 59	·03346			
4. 8	34. 0	4. 34	·1374					
6. 23	34. 30	5. 12	·1372					
7. 23	33. 50	5. 57	·1375					
7. 38	34. 10	6. 49	·1372					
7. 44	33. 30	7. 6	·1373					
8. 15	33. 50	7. 24	·1372					
9. 12	32. 10	8. 44	·1370					
9. 33	32. 50	8. 55	·1371					
10. 24	31. 0	9. 46	·1370					
10. 39	32. 5	10. 0	·1373					
10. 45	31. 30	10. 25	·1370					
10. 57	32. 10	10. 42	·1374					
11. 14	31. 15	11. 0	·1371					
11. 36	32. 30	11. 26	·1367					
11. 51	32. 30	13. 20	·1370					
12. 0	33. 0	14. 3	·1369					
13. 0:	32. 25	17. 24	·1373					
13. 25	32. 40	17. 39	·1370					
13. 33	32. 20	17. 53	·1372					
13. 51	32. 50	20. 26	·1374					
13. 57	32. 35	20. 53	·1367					
14. 30	33. 50	21. 54	·1363					
14. 57	33. 0	22. 10	·1366					
15. 26	33. 40	23. 59	·1365					
16. 0	33. 10							
16. 26	32. 30							
17. 27	33. 20							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Jan. 29								
h m	° ′ ″	h m		h m		h m	°	°
17. 39	20. 31. 40							
18. 19	32. 25							
18. 28	31. 20							
18. 36	32. 10							
20. 38	32. 0							
21. 23	33. 5							
21. 32	32. 35							
21. 51	32. 40							
22. 4	33. 55							
22. 26	34. 50							
22. 34	34. 25							
22. 56	36. 0							
23. 23	36. 10							
23. 45	37. 30							
23. 56	37. 5							
23. 59	37. 35							
Jan. 30		Jan. 30		Jan. 30		Jan. 30		
0. 0	20. 37. 35	0. 0	·1365	0. 0	·03346	1. 0	59 ·0	59 ·1
0. 14	38. 0	0. 15	·1368	4. 10	·03377	3. 0	58 ·8	59 ·0
0. 38	38. 0	0. 57	·1364	10. 16	·03350	9. 0	58 ·8	59 ·0
0. 43	38. 30	1. 11	·1367	11. 44	·03366	21. 0	59 ·3	60 ·0
1. 28	37. 50	1. 55	·1372	12. 41	·03354	22. 30	58 ·8	59 ·2
2. 0	38. 25	2. 14	·1377	14. 20	·03371	23. 0	59 ·0	60 ·0
2. 39	37. 0	2. 43	·1374	20. 12	·03392			
2. 45	37. 10	5. 40	·1377	23. 10	·03358			
2. 57	36. 10	6. 13	·1376	23. 59	·03363			
3. 7	36. 35	6. 54	·1378					
3. 46	34. 50	8. 34	·1376					
3. 57	35. 5	8. 57	·1378					
5. 9	34. 0	9. 36	·1375					
6. 54	32. 50	10. 8	·1367					
9. 29	32. 10	10. 42:	·1369					
9. 42	30. 50	11. 11	·1364					
10. 6	30. 40	12. 8	·1368					
10. 24:	27. 35	12. 29	·1369					
10. 35	27. 50	12. 40	·1366					
10. 51	27. 20	13. 27	·1376					
11. 20	28. 30	14. 0	·1370					
11. 33	31. 20	14. 39	·1369					
	***	14. 50	·1374					
11. 57	33. 15	19. 56	·1376					
12. 32	32. 30	23. 59	·1374					
12. 59	30. 10							
13. 4	30. 20							
13. 41	29. 25							
13. 57	29. 35							
14. 20	32. 30							
15. 21	32. 40							
16. 41	33. 5							
19. 50	31. 15							
20. 57	30. 30							
23. 42	34. 55							
23. 59	35. 5							
Jan. 31		Jan. 31		Jan. 31		Jan. 31		
0. 0	20. 35. 5	0. 0	·1374	0. 0	·03363	0. 0	59 ·3	60 ·3
1. 45	38. 5	2. 42	·1380	5. 25	·03415	1. 0	58 ·6	60 ·5

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Jan. 31		Jan. 31		Jan. 31		Jan. 31			Feb. 1		Feb. 1						
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
2. 9	20. 38. 5	3. 5	·1378	10. 0	·03416	2. 0	59·3	60·5	9. 7	20. 25. 5	10. 30	·1345					
2. 47	37. 40	4. 14	·1376	18. 41	·03408	3. 0	59·6	60·0	9. 15	24. 40	10. 43	·1346					
3. 3	37. 0	4. 30	·1378	23. 42	·03393	9. 0	60·3	60·5	9. 33	22. 30	11. 0	·1351					
4. 27	35. 35	5. 11	·1371		(†)	21. 0	60·1	60·8	9. 46	23. 35	11. 19	·1350					
5. 9	36. 10	5. 25	·1373			22. 0	60·1	60·3	9. 51	23. 10	11. 38	·1357					
5. 23	35. 35	6. 12	·1375			23. 30	59·8	60·1	10. 9	27. 5	11. 44	·1353					
5. 38:	36. 10	6. 57	·1371						10. 38	25. 0	12. 5	·1357					
6. 11	33. 40	7. 15	·1373						11. 2	27. 10	12. 14	·1355					
6. 41	34. 10	8. 12	·1370						11. 19	26. 10	12. 41	·1368					
6. 53	34. 55	8. 23	·1375						11. 26	26. 55	12. 56	·1364					
7. 14	34. 0	8. 39	·1371						11. 38	24. 35	13. 6	·1365					
7. 26	34. 25	15. 15	·1376						11. 42	24. 15	13. 14	·1358					
7. 46	33. 10	17. 55	·1380						11. 59	26. 15	13. 30	·1362					
7. 56	33. 25	19. 52	·1379						12. 9	24. 55	13. 42	·1367					
8. 12	32. 0	20. 26	·1380						12. 39	27. 15	14. 11	·1366					
8. 30	33. 0	20. 54	·1377						12. 44	26. 45	14. 26	·1375					
9. 44	32. 0	21. 20	·1375						12. 53	28. 10	14. 52	·1380					
10. 4	33. 10	22. 11	·1372						13. 5	28. 10	15. 11	·1366					
10. 41	32. 15	23. 21	·1375						13. 43	30. 40	15. 43	·1360					
11. 5	32. 30	23. 59	·1374						13. 56	30. 25	16. 11	·1362					
11. 50	32. 20								14. 2	31. 20	16. 23	·1360					
13. 26	33. 30								14. 23	27. 50	16. 43	·1366					
14. 51	34. 0								14. 38	27. 10	16. 55	·1364					
15. 4	33. 30								14. 42	25. 50	17. 23	·1378					
15. 33	33. 40								14. 50	22. 10	17. 44	·1380					
15. 46	34. 35								15. 6	24. 30	18. 24	·1367					
17. 24	32. 55								15. 19:	24. 30	18. 44	·1364					
18. 8	32. 25								15. 37	27. 5	19. 58	·1370					
18. 41	31. 55								15. 51	29. 0	20. 55	·1364					
19. 5	32. 15								16. 0	32. 25	21. 6	·1365					
20. 11	31. 40								16. 11	32. 30	23. 0	·1363					
20. 30	32. 5								16. 30	37. 20	23. 20	·1360					
20. 41	31. 45								16. 41	35. 15	23. 41	·1364					
21. 24	32. 30								16. 56	36. 10	23. 59	·1364					
22. 7	32. 40								17. 12	35. 35							
23. 24	35. 25								17. 23	34. 25							
23. 42	34. 50								17. 32	35. 25							
23. 59	35. 0								17. 39	34. 15							
									17. 45	35. 5							
Feb. 1		Feb. 1		Feb. 1		Feb. 1				***							
0. 0	20. 35. 0	0. 0	·1374		(†)	0. 0	60·0	60·1	18. 5	38. 0							
0. 56	36. 15	0. 34	·1376	0. 28	·03396	1. 0	60·1	60·3	18. 20	36. 15							
1. 13	37. 50	1. 12	·1377	7. 24	·03424	2. 0	60·0	60·4	18. 38	35. 45							
1. 22	37. 50	1. 40	·1375	9. 53	·03466	3. 0	60·3	60·6	18. 44	36. 30							
1. 43	36. 30	3. 45	·1381	12. 7	·03447	9. 0	60·6	60·7	18. 53	35. 25							
3. 0	36. 35	5. 34	·1377	13. 11	·03406	21. 0	60·1	60·0	19. 19	33. 45							
3. 51	35. 0	5. 52	·1378	13. 31	·03411				19. 26	33. 55							
5. 9	33. 30	7. 24	·1369	14. 58	·03367				19. 45	31. 55							
5. 20	33. 55	7. 55	·1360	15. 14	·03388				20. 5	32. 50							
5. 53	33. 20	8. 10	·1363	16. 27	·03397				20. 19	33. 10							
6. 20	33. 30	8. 41	·1353	17. 55	·03384				20. 26	32. 40							
6. 40	32. 55	8. 48	·1354	23. 59	·03412				20. 38	32. 55							
6. 59	33. 30	9. 12	·1342						20. 47	32. 0							
7. 18	32. 40	9. 21	·1343						21. 15	32. 20							
7. 29	33. 10	9. 30	·1338						21. 35	31. 50							
8. 23	27. 55	9. 56	·1353						21. 51	32. 10							
8. 34	27. 10	9. 59	·1352						21. 57	33. 0							
8. 53	26. 45	10. 12	·1357						22. 9	32. 40							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 1								
h m	° ′ ″	h m		h m		h m	°	°
22. 42	20. 32. 25							
22. 51	33. 10							
	***							
23. 16	33. 20							
23. 36	34. 45							
23. 48	34. 45							
23. 56	35. 10							
23. 59	35. 5							
Feb. 2		Feb. 2		Feb. 2		Feb. 2		
0. 0	20. 35. 5	0. 0	·1364	0. 0	·03412	1. 0	60 ·4	60 ·9
1. 15	36. 35	0. 7	·1367	5. 3	·03429	3. 0	60 ·1	60 ·9
1. 29	36. 35	1. 56	·1375	10. 0	·03406	9. 0	59 ·8	60 ·0
1. 53	37. 50	2. 20	·1373	14. 44	·03417	21. 0	59 ·8	58 ·8
2. 4	37. 25	5. 21	·1375	20. 12	·03396			
2. 12	37. 40	5. 50	·1371	23. 59	·03355			
2. 43	36. 5	6. 1	·1375					
2. 56	36. 25	6. 12	·1371					
3. 9	36. 0	6. 20	·1373					
3. 27	36. 10	6. 29	·1368					
4. 53	33. 55	6. 42	·1370					
5. 3	34. 15	9. 25	·1369					
5. 58	33. 5	13. 22	·1367					
6. 12	33. 40	18. 15	·1374					
8. 32	32. 10	19. 55	·1373					
12. 8	31. 45	22. 57	·1364					
12. 56	32. 50	23. 59	·1366					
13. 8	32. 20							
15. 40	33. 5							
16. 6	32. 30							
17. 0	33. 10							
17. 11	32. 55							
18. 22	32. 30							
18. 42	32. 0							
19. 21	32. 25							
20. 51	30. 40							
21. 56	31. 35							
22. 55	32. 30							
23. 52	34. 55							
23. 59	35. 30							
Feb. 3		Feb. 3		Feb. 3		Feb. 3		
0. 0	20. 35. 30	0. 0	·1366	0. 0	·03355	1. 0	59 ·8	59 ·7
0. 9	36. 40	0. 22	·1369	2. 47	·03415	3. 0	60 ·3	60 ·0
0. 30	36. 40	0. 45	·1372	7. 32	·03457	9. 0	60 ·2	60 ·0
0. 43	38. 10	1. 4	·1369	12. 25	·03403	21. 0	58 ·8	58 ·0
1. 14	38. 55	1. 30	·1371	23. 59	·03320			
1. 25	38. 25	2. 15	·1367					
1. 39	39. 0	2. 42	·1369					
2. 26	38. 30	3. 20	·1366					
3. 0	40. 0	3. 26	·1369					
3. 23	38. 50	3. 44	·1365					
3. 38:	39. 25	4. 22	·1363					
3. 43	37. 50	4. 39	·1367					
3. 57	37. 20	4. 55	·1362					
4. 7	37. 50	5. 10	·1366					
4. 27	34. 40	5. 22	·1357					
4. 37	35. 45	5. 34	·1361					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 3		Feb. 3						
h m	° ′ ″	h m		h m		h m	°	°
4. 57	20. 34. 50	5. 40	·1359					
5. 6	34. 50	5. 51	·1363					
5. 25	32. 25	6. 12	·1360					
5. 30	33. 0	6. 25	·1354					
5. 39	32. 15	6. 44	·1357					
5. 50	36. 0	7. 19	·1358					
6. 20	39. 50	7. 28	·1354					
6. 38	38. 0	7. 55	·1366					
6. 45	35. 35	8. 24	·1357					
6. 56	35. 40	8. 41	·1363					
7. 9	33. 40	9. 0	·1367					
7. 14	33. 30	9. 29	·1363					
7. 23	34. 0	9. 40	·1366					
7. 38	30. 25	12. 25	·1360					
7. 45	29. 20	13. 12	·1361					
8. 0	31. 50	13. 45	·1366					
8. 13	31. 50	14. 26	·1365					
8. 28	30. 40	18. 55	·1376					
8. 38	31. 10	19. 24	·1372					
8. 55	30. 35	19. 53	·1376					
9. 12	32. 15	23. 11	·1365					
9. 18	32. 15	23. 59	·1367					
9. 31	31. 15							
10. 0	31. 50							
10. 51	30. 30							
11. 10	31. 30							
11. 27	30. 45							
11. 41	30. 45							
12. 34	28. 10							
13. 4	32. 0							
13. 16	33. 35							
14. 51	33. 10							
15. 11	33. 35							
15. 39	32. 55							
16. 2	33. 25							
16. 20	32. 50							
16. 41	33. 0							
18. 14	32. 35							
18. 31	33. 0							
18. 53	32. 30							
19. 26	33. 35							
20. 46	32. 15							
22. 9	32. 30							
22. 20	33. 10							
23. 23	33. 50							
23. 34	34. 25							
23. 40	34. 10							
23. 59	35. 30							
Feb. 4		Feb. 4		Feb. 4		Feb. 4		
0. 0	20. 35. 30	0. 0	·1367	0. 0	·03320	0. 0	58 ·8	58 ·1
0. 20	36. 55	0. 10	·1369	0. 39	·03315	8. 0	59 ·8	59 ·6
0. 29	36. 50	0. 42	·1363	2. 26	·03352	21. 0	59 ·5	59 ·3
1. 23	38. 30	3. 54	·1375	5. 0	·03369			
2. 5	37. 0	5. 8	·1372	15. 56	·03362			
4. 21	34. 30	5. 27	·1373	16. 35	·03355			
4. 38	33. 30	6. 24	·1370	22. 40	·03321			
4. 43	33. 55	8. 54	·1374	23. 59	·03328			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 4		Feb. 4						
h m	° ′ ″	h m		h m		h m	°	°
4. 57	20. 33. 25	9. 5	·1370					
5. 14	34. 0	9. 22	·1373					
5. 37	33. 25	10. 41	·1370					
5. 53	33. 10	11. 7	·1373					
6. 20	33. 50	11. 22	·1370					
6. 39	33. 35	11. 36	·1372					
6. 55	34. 15	11. 57	·1370					
8. 26	33. 0	12. 41	·1374					
9. 7	31. 50	15. 11	·1372					
10. 23	31. 50	15. 29	·1374					
10. 39	30. 55	15. 53	·1372					
11. 5	30. 35	16. 11	·1376					
11. 26	30. 40	16. 46	·1378					
11. 40	31. 50	17. 13	·1383					
12. 22	31. 50	19. 41	·1377					
12. 37	32. 50	20. 3	·1374					
12. 44	32. 10	21. 54	·1366					
13. 20	32. 5	23. 59	·1369					
13. 31	31. 50							
14. 20	31. 15							
15. 0	32. 10							
15. 24	32. 15							
15. 30	33. 5							
15. 41	32. 40							
16. 11	36. 30							
16. 52	33. 35							
17. 26	32. 40							
17. 29	31. 30							
17. 44	32. 0							
18. 9	30. 25							
18. 24	31. 20							
18. 41	30. 40							
19. 9	31. 50							
20. 8	31. 0							
20. 34	31. 50							
20. 45	31. 25							
20. 59	32. 5							
21. 20	32. 0							
21. 33	33. 40							
21. 42	32. 45							
22. 54	34. 40							
23. 43	36. 50							
23. 59	36. 30							
Feb. 5		Feb. 5		Feb. 5		Feb. 5		
0. 0	20. 36. 30	0. 0	·1369	0. 0	·03328	1. 0	59 ·3	59 ·1
0. 8	35. 35	0. 25	·1376	0. 41	·03324	3. 0	58 ·8	58 ·5
0. 25	38. 10	0. 42	·1371	2. 1	·03356	9. 0	58 ·8	59 ·0
0. 41	36. 30	1. 8	·1374	3. 29	·03356	21. 0	59 ·6	60 ·0
0. 56	37. 30	1. 25	·1378	3. 52	·03342			
1. 24	37. 30	2. 0	·1376	6. 41	·03344			
1. 43	35. 50	2. 19	·1379	8. 12	·03363			
1. 59	36. 20	2. 35	·1376	10. 0	·03342			
2. 41	35. 15	2. 56	·1379	11. 8	·03344			
2. 58	35. 55	3. 9	·1377	11. 51	·03312			
3. 11	35. 25	3. 26	·1382	11. 57	·03321			
3. 32	36. 15	3. 51	·1376	12. 30	·03311			
3. 44	34. 50	4. 19	·1375	12. 42	·03290			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 5		Feb. 5		Feb. 5				
h m	° ′ ″	h m		h m		h m	°	°
4. 16	20. 34. 5	4. 41	·1378	13. 36	·03286			
5. 45	33. 30	5. 11	·1374	14. 11	·03262			
6. 26	34. 45	5. 21	·1376	14. 16	·03277			
6. 37	35. 45	5. 33	·1374	14. 39	·03272			
6. 45	35. 30	5. 45	·1379	14. 55	·03285			
7. 12	35. 35	6. 25	·1375	15. 26	·03280			
7. 35	36. 30	6. 41	·1368	17. 51	·03345			
7. 45	31. 25	7. 17	·1364	23. 59	·03327			
7. 49	31. 25	7. 24	·1369					
7. 55	26. 50	7. 41	·1360					
8. 1	26. 30	7. 44	·1361					
8. 25	30. 10	7. 54	·1356					
8. 33	30. 20	8. 12	·1369					
8. 43	32. 45	8. 20	·1371					
8. 57	31. 55	8. 36	·1366					
9. 42	32. 30	8. 44	·1369					
10. 18	27. 50	8. 57	·1366					
10. 24	27. 55	9. 56	·1375					
10. 33	27. 30	10. 24	·1363					
10. 54	23. 35	10. 36	·1366					
10. 59	25. 5	10. 56	·1359					
11. 4	24. 50	11. 19	·1366					
11. 10	26. 40	11. 43	·1356					
11. 24	25. 20	12. 4	·1338					
11. 39	30. 40	12. 15	·1345					
12. 8	18. 30	12. 16	·1343					
12. 40	20. 15	12. 29	·1350					
12. 52	14. 20	12. 32	·1349					
13. 0	14. 25	12. 45	·1359					
13. 19	20. 50	12. 56	·1355					
13. 26	18. 50	13. 15	·1359					
13. 41	25. 15	13. 26	·1351					
13 53	24. 50	13. 41	·1359					
14. 8	21. 10	13. 42	·1358					
14. 23	27. 45	13. 50	·1365					
14. 39	19. 15	14. 0	·1356					
14. 57	24. 0	14. 5	·1357					
15. 10	24. 0	14. 21	·1347					
15. 38:	21. 35	14. 28	·1353					
16. 9	25. 0	14. 41	·1354					
16. 15	26. 35	15. 11	·1372					
16. 54	28. 35	15. 43	·1364					
17. 33	28. 40	16. 39	·1360					
18. 2	30. 20	17. 45	·1366					
18. 11	30. 20	18. 14	·1374					
18. 22	30. 5	19. 8	·1374					
18. 38	30. 20	19. 19	·1371					
18. 46	30. 50	19. 39	·1374					
18. 57	30. 50	19. 51	·1376					
19. 13	30. 5	20. 0	·1368					
19. 24	30. 40		***					
19. 41	33. 55	20. 35	·1357					
20. 4	35. 5	20. 37	·1358					
20. 9	34. 15	20. 45	·1345					
20. 23	34. 0	21. 0	·1348					
20. 27	34. 35	21. 11	·1346					
	***	21. 15	·1350					
20. 58	33. 5	21. 30	·1349					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 5		Feb. 5						
h m	° ′ ″	h m		h m		h m	°	°
21. 36	20. 37. 5	22. 18	·1370					
21. 46	35. 10	22. 39	·1375					
21. 56	35. 0	22. 51	·1372					
22. 4	35. 55	22. 56	·1377					
22. 20	35. 55	23. 0	·1375					
22. 29	34. 30	23. 5	·1378					
22. 43	33. 25	23. 12	·1376					
	***	23. 13	·1377					
23. 12	35. 15	23. 41	·1372					
23. 30	32. 50	23. 45	·1372					
23. 59	33. 50	23. 57	·1378					
		23. 59	·1376					
Feb. 6		Feb. 6		Feb. 6		Feb. 6		
0. 0	20. 33. 50	0. 0	·1376	0. 0	·03327	1. 0	59 ·8	59 ·3
0. 6	33. 40	0. 19	·1384	2. 27	·03337	3. 0	58 ·8	59 ·0
0. 18	33. 15	0. 22	·1376		***	9. 0	59 ·6	60 ·1
	***	0. 41	·1373	3. 9	·03394	21. 0	59 ·8	60 ·0
0. 41	35. 0	0. 49	·1383	3. 16	·03378	22. 0	59 ·3	60 ·0
0. 56	36. 45	1. 11	·1378		***	23. 0	59 ·6	60 ·0
1. 0	35. 40	1. 57	·1383	4. 9	·03416			
1. 30	37. 30	2. 14	·1380	5. 7	·03392			
1. 41	37. 0	2. 38	·1392	5. 26:	·03394			
2. 8	38. 20	2. 43	·1417	5. 49	·03408			
2. 26	37. 50	2. 50	·1398	6. 22	·03540			
2. 41	41. 20	2. 59	·1409	6. 35	·03550			
2. 53	46. 50	3. 25	·1349	7. 11	·03464			
2. 59	42. 15	3. 28	·1359	7. 25	·03477			
3. 9	45. 30	3. 40	·1348	8. 8	·03432			
3. 26	49. 50	3. 41	·1361	9. 37	·03391			
3. 30	48. 40	3. 48	·1342	12. 58	·03366			
3. 33	49. 55	3. 57	·1351	13. 21	·03324			
3. 38	46. 55	4. 0	·1345	13. 43	·03317			
3. 50	54. 50	4. 8	·1355	14. 4	·03278			
4. 12	48. 20	4. 13	·1351	14. 42	·03240			
4. 16	48. 30	4. 20	·1356	15. 52:	·03297			
4. 29	44. 45	4. 25	·1354	18. 21	·03331			
4. 38	45. 25	4. 30	·1358	23. 20	·03338			
5. 6	41. 30	4. 35	·1355	23. 59	·03364			
5. 11	41. 55	4. 42	·1363					
5. 38	38. 30	4. 54	·1360					
5. 43	38. 30	5. 9	·1366					
5. 49	37. 10	5. 20	·1358					
6. 9	28. 40	5. 39	·1363					
6. 13	30. 5	5. 56	·1342					
6. 19	23. 45	6. 4	·1348					
6. 26	25. 30	6. 12	·1331					
6. 28	25. 30	6. 25	·1353					
6. 33	30. 40	6. 38	·1342					
6. 42	25. 0	6. 50	·1360					
7. 0	30. 50	6. 57	·1344					
7. 12	19. 45	7. 8	·1349					
7. 18	20. 55	7. 12	·1339					
7. 26	19. 15	7. 26	·1359					
7. 38	28. 55	7. 41	·1353					
7. 46	28. 55	7. 52	·1356					
8. 1	32. 45	8. 2	·1352					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 6		Feb. 6						
h m	° ′ ″	h m		h m		h m	°	°
8. 12	20. 32. 45	8. 15	·1356					
8. 27	34. 40	8. 54	·1360					
8. 45	35. 55	9. 4	·1356					
9. 57	33. 5	10. 6	·1363					
10. 18	33. 35	10. 20	·1360					
10. 29	32. 55	10. 30	·1364					
	***	11. 12	·1358					
11. 7	33. 40	11. 21	·1360					
11. 16	33. 10	12. 18	·1358					
11. 28	33. 35	12. 42	·1353					
11. 50	33. 15	13. 12	·1378					
12. 32	31. 30	13. 30	·1365					
12. 53	30. 55	13. 49	·1377					
13. 9	34. 50	14. 12	·1374					
13. 22	31. 50	14. 52	·1356					
13. 30	33. 50	15. 12	·1365					
13. 46	37. 35	15. 26	·1363					
13. 56	34. 55	15. 41	·1357					
14. 21	36. 10	15. 55	·1354					
14. 42	25. 30	16. 12	·1361					
14. 56	23. 30	16. 26	·1363					
15. 12	27. 0	16. 38	·1361					
15. 24	31. 10	17. 11	·1373					
15. 38	32. 0	17. 41	·1370					
15. 56	30. 10	17. 56	·1364					
15. 59	31. 15	18. 57	·1369					
16. 4	30. 40	19. 16	·1364					
17. 12	29. 30	19. 44	·1365					
17. 50	32. 20	20. 32	·1359					
18. 11	32. 20	20. 43	·1353					
18. 23	34. 0	21. 52	·1364					
18. 41	34. 20	22. 57	·1344					
18. 55	33. 35	23. 12	·1333					
19. 23	35. 30	23. 15	·1337					
19. 49	33. 25	23. 24	·1329					
19. 56	34. 25	23. 47	·1354					
20. 11	33. 55	23. 59	·1352					
20. 26	35. 20							
20. 38	34. 25							
	***							
21. 16	36. 50							
21. 28	37. 15							
21. 39	36. 30							
21. 43	38. 10							
22. 26	38. 35							
22. 41	36. 30							
23. 0	38. 30							
23. 23	34. 40							
23. 31	35. 30							
23. 44	37. 25							
23. 55	37. 5							
23. 59	37. 25							
Feb. 7		Feb. 7		Feb. 7		Feb. 7		
0. 0	20. 37. 25	0. 0	·1352	0. 0	·03364	0. 0	59 ·8	60 ·0
0. 8	38. 35	0. 15	·1348	1. 25	·03362	1. 0	59 ·8	60 ·0
0. 19	38. 25	0. 40	·1354	4. 53	·03448	2. 0	59 ·9	60 ·0
0. 27	39. 45	0. 45	·1351	6. 12	·03425	3. 0	59 ·8	60 ·1

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.	Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 7		Feb. 7		Feb. 7		Feb. 7			Feb. 7		Feb. 7						
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
0. 38	20. 39. 45	1. 12	·1356	6. 29	·03455	9. 0	59 ·3	59 ·2	9. 47	20. 23. 25	11. 55	·1347					
0. 53	38. 20	1. 25	·1351	6. 42	·03457	21. 0	57 ·3	56 ·0	9. 58	9. 5	11. 59	·1349					
1. 23	39. 10		***	6. 53	·03538	22. 0	58 ·0	57 ·2	10. 14	25. 30	12. 5	·1346					
1. 27	38. 0	2. 28	·1362	7. 5	·03440	23. 0	58 ·6	57 ·8	10. 23	27. 45	12. 13	·1348					
1. 43	37. 30	2. 43	·1368	7. 26	·03416				10. 28	24. 30	12. 15	·1341					
1. 51	36. 45		***	7. 51	·03362				10. 30	23. 10	12. 27	·1348					
1. 56	38. 0	3. 4	·1367	7. 57	·03372				10. 35	25. 40	12. 55	·1345					
	***	3. 16	·1363	8. 9	·03356				10. 45	12. 5	13. 14	·1351					
2. 16	38. 20	3. 25	·1365	8. 46	·03397				10. 57	17. 25	13. 41	·1348					
2. 19	38. 5	3. 43	·1354	9. 34	·03384				11. 52	25. 50	14. 29	·1351					
2. 38	37. 5	3. 55	·1340	10. 9	·03277				11. 59	25. 40	14. 50	·1346					
2. 45	38. 0	4. 11	·1356	10. 16	·03274				12. 9	28. 20	14. 55	·1348					
2. 57	38. 30	4. 14	·1354	10. 40	·03200				12. 18	26. 55	15. 14	·1335					
3. 5	39. 20	4. 15	·1359	10. 45	·03214				12. 23	28. 10	15. 42	·1350					
3. 18	38. 15	4. 16	·1356	10. 58	·03170				12. 25	27. 15	16. 12	·1366					
3. 26	39. 10	4. 25	·1359	11. 26:	·03260				12. 30	27. 15	16. 42	·1375					
3. 36	38. 40	4. 27	·1356	12. 19	·03297				12. 41	23. 55	16. 51	·1378					
3. 50	34. 20	4. 41	·1358	12. 38	·03283				12. 44	23. 55	17. 22	·1364					
3. 56	25. 30		***	12. 58	·03300				13. 8:	30. 10	17. 53	·1362					
4. 6	25. 55	5. 6	·1342	14. 59	·03239				13. 25	30. 40		***					
	***	5. 10	·1344	15. 25	·03163				13. 33	30. 10	18. 50	·1361					
4. 23	22. 25	5. 19	·1337	15. 41	·03145				13. 38	30. 15	19. 14	·1346					
4. 33	26. 30	5. 26	·1343	16. 4	·03180				14. 5	24. 30	19. 36	·1347					
4. 51	32. 40	5. 35	·1339	16. 42	·03215				14. 26	23. 20	19. 40	·1354					
4. 58	34. 30	5. 52	·1351	17. 4	·03212				14. 39	26. 0	20. 6	·1358					
5. 6	32. 15	5. 56	·1344	17. 40:	·03231				15. 18	45. 30	20. 22	·1356					
5. 10	32. 40	6. 8	·1354	19. 6	·03232				15. 26	43. 40	20. 25	·1358					
5. 16	31. 40	6. 16	·1343	19. 46	·03245				15. 34	42. 40	20. 34	·1356					
5. 26	29. 10	6. 20	·1346	20. 44	·03246				15. 43	37. 35	20. 49	·1360					
5. 31	30. 15	6. 30	·1336	22. 12	·03232				16. 9	32. 55	20. 58	·1354					
5. 37	28. 35	6. 41	·1344	23. 36	·03257				16. 24	33. 10	21. 55	·1345					
5. 43	28. 35	6. 52	·1333		(†)				16. 46	36. 0	22. 22	·1358					
5. 54	31. 15	7. 6	·1400						16. 59	36. 10	23. 0	·1357					
5. 59	30. 50	7. 13	·1353						17. 23	33. 55	23. 25	·1359					
6. 8	32. 10	7. 14	·1355						17. 30	34. 45	23. 59	·1359					
6. 14	30. 15	7. 15	·1327						17. 43	34. 55							
6. 24	35. 10	7. 26	·1366						17. 57	36. 15							
6. 29	32. 40	7. 30	·1354						18. 2	35. 35							
6. 41	38. 45	7. 44	·1372						18. 7	37. 15							
6. 56	16. 15	8. 4	·1344						18. 58	33. 20							
7. 8	49. 10	8. 21	·1303						19. 7	32. 10							
7. 10	44. 15	8. 42	·1319						19. 24	31. 45							
7. 15	27. 50	8. 54	·1318						19. 27	30. 15							
7. 19	36. 55	9. 25	·1328						19. 41	33. 25							
7. 26	29. 40	9. 39	·1346						19. 58	33. 35							
7. 36	30. 25	9. 45	·1371						20. 25	32. 15							
7. 44	36. 30	9. 57	·1365						20. 31	34. 10							
7. 54	35. 15	10. 6	·1375						20. 43	34. 45							
7. 59	38. 20	10. 14	·1349						21. 10	32. 40							
8. 23	14. 55	10. 27	·1366						21. 55	36. 30							
8. 43	20. 10	10. 50	·1333							***							
8. 57	22. 40	10. 55	·1340						22. 41	34. 30							
9. 4	25. 40	11. 11	·1301						23. 14	35. 40							
9. 10	25. 50	11. 24	·1332						23. 23	35. 15							
9. 15	18. 0	11. 26	·1331						23. 29	36. 25							
9. 24	28. 45	11. 41	·1341						23. 37	36. 35							
9. 32	26. 0	11. 43	·1340						23. 43	35. 40							
9. 40	21. 10	11. 48	·1348						23. 59	34. 45							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Feb. 8		Feb. 8		Feb. 8		Feb. 8		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 34. 40	0. 0	·1359		(†)	0. 0	59 ·1	58 ·9
0. 13	34. 30		***	0. 30	·03258	1. 0	59 ·4	59 ·1
0. 20	35. 40	0. 51	·1367	4. 54	·03348	2. 0	59 ·8	59 ·6
0. 38	35. 0	1. 9	·1360	5. 12	·03378	3. 0	59 ·5	59 ·2
1. 23	37. 25	1. 41	·1366	5. 26	·03370	9. 0	58 ·2	57 ·2
	***		***		(†)	21. 0	59 ·3	60 ·0
2. 3	38. 30	2. 19	·1361	8. 52	·03318			
2. 15	37. 50	2. 42	·1366	10. 26:	·03284			
	***	3. 38	·1356	10. 57	·03300			
2. 57	38. 15	3. 45	·1347	11. 39	·03305			
3. 6	38. 40	4. 10	·1341	12. 8	·03316			
3. 13	36. 50	4. 47	·1366	12. 55	·03308			
3. 38	38. 20	4. 52	·1362	18. 26	·03324			
3. 44	34. 40	5. 0	·1368	21. 44	·03317			
3. 57	32. 45	5. 14	·1358	23. 59	·03328			
4. 3	32. 35	5. 25	·1364					
4. 13	29. 35	5. 41	·1354					
4. 23	29. 35	5. 51	·1344					
4. 53	33. 50	6. 0	·1348					
4. 56	33. 0		(†)					
5. 9	33. 20	8. 44	·1361					
5. 23	31. 30	9. 13	·1364					
5. 28	34. 50	10. 14	·1359					
5. 45	38. 30	11. 0	·1353					
5. 57	35. 30	11. 18	·1348					
6. 0	35. 20	11. 41	·1356					
	(†)	12. 10	·1359					
8. 44	34. 25	12. 26	·1351					
9. 56	32. 35	12. 44	·1354					
10. 15	31. 40	12. 55	·1350					
10. 28	30. 35	13. 0	·1354					
10. 41	29. 55	13. 57	·1357					
10. 56	29. 55	14. 21	·1355					
11. 14	22. 45	14. 41	·1353					
11. 30	24. 40	15. 22	·1357					
11. 41	25. 0	16. 7	·1354					
11. 59	27. 35	17. 10	·1359					
12. 23	28. 35	18. 36	·1361					
12. 38	30. 20	18. 55	·1364					
12. 41	30. 0	19. 26	·1360					
12. 44	30. 50	19. 45	·1364					
12. 56	30. 25	20. 44	·1365					
13. 1	30. 40	21. 8	·1360					
13. 32	30. 15	21. 36	·1363					
13. 55	31. 50	23. 12	·1359					
14. 26	32. 50	23. 37	·1361					
15. 0	32. 25	23. 49	·1357					
15. 26	33. 5	23. 59	·1355					
15. 50	33. 10							
15. 56	33. 40							
16. 8	33. 25							
16. 14	34. 20							
16. 46	33. 10							
17. 35	33. 10							
17. 43	32. 30							
17. 54	33. 10							
18. 12	32. 10							
19. 13	32. 25							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Feb. 8								
h m	° ′ ″	h m		h m		h m	°	°
19. 20	20. 31. 30							
21. 11	30. 50							
21. 27	31. 50							
22. 41	33. 30							
22. 59	33. 10							
23. 16	33. 55							
23. 38	36. 20							
23. 47	36. 20							
23. 56	35. 5							
23. 59	35. 35							
Feb. 9		Feb. 9		Feb. 9		Feb. 9		
0. 0	20. 35. 35	0. 0	·1355	0. 0	·03328	1. 0	59 ·8	60 ·8
0. 3	36. 0	0. 36	·1353	0. 29	·03324	3. 0	59 ·3	60 ·0
0. 16	35. 40	1. 24	·1365	0. 54	·03346	9. 0	59 ·8	60 ·0
0. 23	34. 55	2. 12	·1362	1. 53	·03361	21. 0	59 ·1	59 ·7
0. 31	34. 55	2. 30	·1366	2. 22	·03357			
0. 39	36. 55	2. 54	·1362	3. 56	·03353			
0. 50	37. 25	3. 12	·1366	6. 56	·03328			
1. 3	37. 5	3. 45	·1367	7. 22	·03338			
1. 9	35. 55	4. 10	·1364	8. 6	·03327			
1. 50	37. 55	4. 17	·1365	10. 58	·03321			
2. 18	36. 30	4. 34	·1363	12. 22	·03337			
2. 34	36. 55	5. 57	·1366	13. 11	·03327			
2. 55	35. 30	6. 12	·1371	13. 40	·03308			
3. 4	35. 55	6. 24	·1370	15. 6	·03320			
3. 41	34. 30	6. 54	·1360	20. 28	·03320			
4. 0	35. 0	7. 13	·1367	22. 41	·03297			
4. 45	33. 25	7. 41	·1368	23. 59	·03300			
5. 41	32. 50	7. 57	·1365					
6. 10	33. 10	8. 14	·1369					
6. 27	32. 25	8. 44	·1371					
6. 47:	32. 40	9. 0	·1367					
7. 5	30. 20	9. 20	·1373					
7. 21	32. 25	10. 11	·1366					
7. 38	32. 35	10. 23	·1368					
8. 10	29. 45	10. 43	·1372					
8. 38	32. 5	11. 56	·1359					
8. 59	32. 20	12. 19	·1362					
9. 10	27. 40	12. 54	·1357					
9. 19	29. 20	13. 18	·1364					
9. 28	29. 30	13. 49	·1364					
9. 53	30. 50	14. 14	·1367					
10. 11	30. 20	14. 57	·1363					
10. 17	31. 20	15. 23	·1366					
10. 32	31. 10	15. 52	·1362					
10. 40	31. 40	16. 38	·1367					
10. 58	28. 50	19. 20	·1370					
11. 11	28. 20	23. 4	·1357					
11. 26	28. 40	23. 36	·1360					
11. 39	27. 35	23. 49	·1359					
12. 28	30. 20	23. 59	·1365					
12. 51	30. 20							
12. 55	31. 40							
12. 59	34. 20							
13. 18	37. 10							
13. 39	33. 10							
14. 26	30. 10							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

February 8. The timepiece giving motion to the Horizontal Force and Declination cylinder stopped from 6h. 0m. to 8h. 44m.

February 8. The Vertical Force timepiece was stopped from 5h. 26m. to 8h. 52m.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 9								
h m	° ′ ″	h m		h m		h m	°	°
14. 59	20. 31. 5							
15. 24	32. 10							
15. 33	33. 25							
15. 45	33. 5							
15. 59	33. 15							
16. 28	32. 20							
16. 44	32. 35							
17. 11	32. 5							
17. 24	32. 20							
19. 8	31. 55							
20. 30	30. 50							
21. 41	31. 10							
23. 23	34. 40							
23. 38	35. 40							
23. 49	35. 5							
23. 59	35. 40							
Feb. 10		Feb. 10		Feb. 10		Feb. 10		
0. 0	20. 35. 40	0. 0	·1360	0. 0	·03300	1. 0	59·6	59·2
0. 21	36. 20	5. 39	·1356	1. 14	·03303	3. 0	59·8	59·2
0. 46	36. 20	7. 36	·1372	3. 55	·03318	9. 0	58·9	58·0
1. 12	37. 35	9. 4	·1369	9. 39	·03298	21. 45	59·3	59·0
1. 26	37. 10	9. 19	·1372	12. 16	·03302			
1. 38	37. 40	9. 56	·1368	13. 35	·03303			
2. 39	37. 10	11. 10	·1367	16. 26	·03315			
2. 56	36. 15	11. 41	·1373	19. 41	·03324			
4. 14	34. 5	12. 11	·1369	22. 12	·03302			
5. 55	33. 25	12. 29	·1374	23. 59	·03297			
6. 10	33. 40	14. 10	·1365					
6. 43	33. 0	18. 56	·1371					
7. 17	33. 0	19. 44	·1374					
7. 33	32. 25	20. 40	·1370					
8. 11	32. 45	21. 40	·1372					
8. 22	32. 15	23. 59	·1360					
8. 40	32. 35							
8. 50	32. 0							
9. 14	32. 45							
9. 35	32. 5							
11. 13	32. 45							
11. 39	31. 25							
11. 50	31. 55							
12. 50	31. 35							
13. 15	32. 25							
13. 43	31. 5							
14. 20	31. 55							
14. 39	33. 0							
15. 9	32. 25							
15. 26	32. 55							
16. 50	31. 45							
17. 6	32. 5							
17. 59	31. 35							
18. 59	31. 35							
19. 20	31. 10							
19. 33	31. 10							
19. 50	30. 25							
20. 11	30. 25							
20. 26	29. 35							
20. 55	29. 35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 10								
h m	° ′ ″	h m		h m		h m	°	°
21. 36	20. 32. 30							
21. 59	32. 30							
23. 0	34. 50							
23. 13	35. 15							
23. 22	36. 10							
23. 59	37. 15							
Feb. 11		Feb. 11		Feb. 11		Feb. 11		
0. 0	20. 37. 15	0. 0	·1360	0. 0	·03297	1. 0	59·0	59·5
0. 14	37. 25	0. 24	·1362	1. 45	·03283	8. 30	57·6	56·5
0. 40	39. 10	0. 45	·1356	2. 30	·03296	21. 0	59·0	59·6
0. 59	41. 40	1. 43	·1363	7. 13	·03246			
1. 29	40. 0	2. 14	·1372	8. 9	·03255			
2. 3	37. 30	2. 41	·1368	19. 14	·03266			
2. 28	37. 10	3. 0	·1376	22. 41	·03263			
2. 56	36. 30	3. 23	·1372	23. 59	·03277			
3. 7	36. 55	3. 39	·1376					
3. 34	35. 30	3. 57	·1373					
4. 26	34. 25	5. 12	·1369					
5. 29	33. 40	5. 41	·1373					
5. 53	33. 40	6. 4	·1369					
6. 0	34. 15	6. 45	·1371					
6. 9	33. 35	7. 21	·1362					
6. 29	33. 40	7. 46	·1361					
6. 53	32. 40	8. 6	·1365					
7. 23	30. 5	8. 57	·1358					
7. 40	30. 35	9. 15	·1365					
7. 46	30. 5	9. 29	·1361					
7. 56	31. 10	10. 41	·1363					
8. 8	30. 50	10. 56	·1362					
8. 14	30. 50	12. 11	·1365					
8. 26	31. 45	13. 26	·1364					
9. 0	30. 15	15. 41	·1372					
9. 9	30. 40	16. 40	·1370					
9. 27	29. 25	17. 19	·1374					
10. 50	29. 40	18. 42	1372					
11. 20	30. 45	19. 56	·1376					
12. 14	32. 50	21. 57	·1365					
12. 21	32. 35	22. 37	·1356					
13. 12	32. 30	23. 15	·1360					
15. 13	33. 30	23. 59	·1360					
16. 8	31. 50							
16. 37	32. 55							
17. 7	31. 45							
17. 33	31. 15							
18. 16	31. 55							
18. 30	31. 35							
18. 50	31. 30							
19. 34	33. 5							
19. 43	32. 10							
19. 50	32. 10							
20. 34	29. 30							
21. 3	29. 45							
21. 29	31. 10							
21. 36	31. 0							
22. 23	33. 10							
22. 44	32. 55							
23. 36	35. 40							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 11								
h m	° ′ ″	h m		h m		h m	°	°
23. 5	20. 35. 55							
23. 59	37. 5							
Feb. 12		Feb. 12		Feb. 12		Feb. 12		
0. 0	20. 37. 5	0. 0	·1360	0. 0	·03277	1. 0	59 ·2	59 ·3
0. 21	37. 55	0. 19	·1358	1. 28	·03285	3. 0	59 ·2	59 ·0
0. 40	40. 5	0. 41	·1362	1. 55	·03280	9. 0	58 ·8	58 ·3
0. 44	39. 30	0. 59	·1356	2. 54	·03298	21. 0	58 ·8	58 ·0
0. 53	40. 15	1. 30	·1362	4. 9	·03306			
0. 58	39. 40	1. 57	·1350	7. 54	·03332			
1. 42	43. 30	2. 21	·1358	8. 14	·03351			
1. 55	42. 25	3. 11	·1365	9. 11	·03323			
2. 27	43. 50	3. 56	·1360	10. 55	·03247			
3. 4	44. 25	4. 43	·1367	11. 55	·03276			
3. 39	41. 30	5. 0	·1365	12. 36	·03263			
3. 51	39. 55	5. 14	·1370	12. 55	·03265			
4. 11	38. 25	6. 11	·1357	13. 36	·03216			
4. 26	38. 25	6. 25	·1361	13. 53	·03224			
4. 39	38. 0	6. 27	·1359	14. 6	·03216			
4. 52	38. 50	6. 44	·1361	14. 22	·03218			
4. 57	38. 50	7. 22	·1357	15. 18	·03255			
5. 4	39. 20	7. 42	·1353	18. 11	·03277			
5. 12	37. 0	7. 55	·1344	18. 45	·03271			
5. 23	37. 40	8. 18	·1363	19. 56	·03277			
5. 42	36. 40	8. 36	·1360	21. 12	·03258			
5. 53	36. 55	8. 52	·1362	22. 9	·03243			
6. 12	33. 35	9. 16	·1355	23. 20	·03240			
6. 26	33. 35	9. 55	·1355	23. 59	·03246			
6. 40	32. 30	10. 5	·1364					
6. 54	32. 45	10. 21	·1354					
7. 12	33. 40	10. 31	·1360					
7. 23	32. 30	10. 43	·1358					
7. 27	32. 20	11. 12	·1343					
7. 55	20. 30	11. 21	·1346					
8. 9	24. 25	11. 29	·1341					
8. 26	26. 5	11. 41	·1346					
8. 33	24. 50	11. 45	·1343					
8. 51	25. 50	11. 56	·1352					
8. 58	25. 25	12. 12	·1359					
9. 9	25. 30	12. 21	·1357					
9. 29:	28. 35	12. 26	·1359					
9. 40	28. 25	12. 39	·1354					
10. 2	17. 50	12. 54	·1361					
10. 9	16. 50	13. 12	·1375					
10. 17	17. 10	13. 41	·1349					
10. 40	23. 10	13. 53	·1358					
10. 58	22. 15	14. 5	·1357					
11. 30	24. 10	14. 19	·1364					
11. 44	23. 40	15. 20	·1353					
11. 53	24. 50	16. 12	·1353					
12. 26	32. 50	16. 55	·1362					
12. 37	32. 35	17. 54	·1360					
12. 58	28. 15	19. 0	·1366					
13. 8	30. 15	19. 32	·1362					
13. 14	30. 5	19. 54	·1366					
13. 27	33. 15	19. 57	·1362					
13. 41	34. 40	20. 12	·1369					
13. 54	32. 15	20. 14	·1368					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 12		Feb. 12						
h m	° ′ ″	h m		h m		h m	°	°
14. 5	20. 33. 0	20. 54	·1364					
14. 17	30. 15	21. 39	·1361					
14. 26	30. 5	21. 46	·1364					
14. 43	25. 40	22. 39	·1355					
14. 58	25. 0	23. 30	·1353					
15. 11	27. 30	23. 59	·1360					
15. 26	29. 40							
	***							
16. 13	31. 5							
16. 26	30. 30							
16. 34	30. 50							
16. 56	29. 40							
	***							
17. 27	30. 5							
17. 50	32. 0							
18. 12	32. 30							
18. 26	32. 30							
18. 42	30. 10							
18. 59	29. 55							
19. 26	30. 30							
19. 31	30. 0							
19. 41	30. 5							
19. 53	31. 10							
19. 57	29. 25							
20. 9	30. 5							
20. 23	30. 0							
20. 35	31. 15							
20. 45	30. 30							
21. 29	30. 5							
21. 43	31. 55							
22. 11	31. 35							
22. 41	33. 10							
22. 53	33. 20							
23. 11	35. 45							
23. 26	35. 35							
23. 54	37. 5							
23. 59	38. 20							
Feb. 13		Feb. 13		Feb. 13		Feb. 13		
0. 0	20. 38. 20	0. 0	·1360	0. 0	·03246	1. 0	59 ·3	59 ·0
0. 13	40. 10	0. 13	·1359	2. 8	·03295	3. 0	58 ·9	59 ·0
0. 33	38. 45	0. 14	·1360	2. 28	·03280	9. 0	59 ·6	59 ·9
0. 42	39. 25	0. 30	·1352	3. 26	·03319	21. 0	58 ·1	57 ·6
0. 51	39. 15	0. 41	·1354	3. 54	·03317	22. 0	58 ·1	57 ·6
0. 57	40. 40	0. 47	·1351	4. 12	·03329	23. 0	58 ·1	57 ·6
1. 22	39. 50	0. 55	·1353	5. 14	·03328			
1. 25	41. 10	1. 8	·1351	5. 44	·03312			
	***	1. 25	·1361	6. 22	·03320			
2. 23	44. 55	2. 12	·1375	6. 45	·03358			
2. 32	43. 40	2. 36	·1358	7. 20	·03372			
2. 53	42. 10	2. 54	·1359	7. 53	·03363			
3. 4	39. 20	3. 0	·1353	8. 54	·03356			
3. 9	38. 30	3. 30	·1373	9. 8	·03357			
	***	3. 54	·1361	10. 17	·03330			
3. 33	38. 30	4. 10	·1367	11. 10	·03306			
3. 56	34. 55	4. 38	·1368	11. 13	·03308			
	***	4. 45	·1375	11. 30	·03286			
4. 27	32. 55	4. 57	·1373	12. 5	·03280			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Feb.13		Feb.13		Feb.13				
h m	° ′ ″	h m		h m		h m	°	°
4. 51	20. 35. 10	5. 10	·1376	13. 21	·03282			
5. 7	34. 20	5. 25	·1373	13. 42	·03286			
5. 23	37. 20	6. 11	·1356	15. 14	·03282			
5. 41	38. 55	6. 23	·1341	16. 19	·03263			
5. 56	38. 40	6. 41	·1336	19. 33	·03260			
6. 10	35. 40	6. 56	·1342	21. 4	·03250			
6. 26	34. 0	7. 12	·1333	21. 58	·03227			
6. 35	30. 0	7. 39	·1346	23. 59	·03244			
6. 53	24. 30	7. 43	·1341					
6. 59	26. 15	7. 59	·1349					
7. 9	30. 40	8. 0	·1346					
7. 19	30. 20	8. 25	·1354					
7. 26	31. 40	8. 55	·1348					
7. 36	35. 35	9. 11	·1351					
7. 53	34. 20	9. 26	·1341					
7. 59	34. 50	10. 11	·1354					
8. 9	34. 5	10. 19	·1358					
8. 16	34. 50	10. 39	·1354					
8. 37	33. 0	10. 54	·1361					
8. 55	26. 50	10. 56	·1359					
9. 9	27. 40	11. 20	·1382					
9. 20	26. 55	11. 37	·1368					
9. 28	25. 30	12. 0	·1360					
10. 6	30. 0	12. 30	·1356					
10. 13	31. 55	13. 12	·1359					
10. 27	32. 10	13. 33	·1355					
10. 39	30. 50	13. 57	·1357					
10. 51	31. 25	15. 27	·1358					
10. 59	26. 15	15. 42	·1354					
11. 12	30. 55	16. 49	·1356					
11. 23	30. 55	17. 12	·1362					
11. 29	30. 10	17. 36	·1357					
11. 41	32. 20	18. 12	·1360					
12. 9	32. 40	19. 27	·1365					
12. 39	34. 40	20. 14	·1364					
13. 10	33. 0	20. 53	·1359					
13. 26	31. 20	21. 19	·1361					
13. 42	33. 5	21. 56	·1357					
13. 55	32. 45	22. 27	·1346					
14. 3	33. 50	23. 36	·1357					
14. 53	32. 45	23. 59	·1360					
14. 59	31. 55							
15. 21	31. 55							
15. 27	32. 50							
15. 32	32. 50							
15. 44	35. 20							
	***							
16. 25	34. 45							
16. 38	35. 0							
16. 59	32. 30							
17. 10	32. 55							
17. 16	32. 45							
17. 26	31. 45							
17. 46	30. 45							
17. 59	31. 15							
18. 10	30. 50							
18. 23	30. 55							
18. 40	32. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
Feb.13								
h m	° ′ ″	h m		h m		h m	°	°
19. 31	20. 30. 0							
20. 58	28. 35							
	***							
22. 9	32. 25							
22. 22	34. 10							
22. 39	35. 5							
23. 16	33. 25							
23. 59	34. 25							
Feb.14		Feb.14		Feb.14		Feb.14		
0. 0	20. 34. 25	0. 0	·1360	0. 0	·03244	0. 0	58·8	58·3
0. 11	34. 45	0. 26	·1364	2. 12	·03272	1. 0	58·0	58·4
0. 26	37. 20	1. 2	·1363	3. 10	·03296	2. 0	58·8	58·2
0. 44	38. 10	1. 32	·1366	6. 24	·03282	3. 0	59·0	58·7
0. 57	37. 55	2. 0	·1361	8. 9	·03299	9. 0	58·5	57·7
1. 19	38. 30	2. 35	·1369	8. 29	·03290	21. 0	59·6	60·0
1. 33	39. 35	3. 20	·1366	8. 38	·03275	22. 0	59·3	59·5
2. 13	37. 10	3. 42	·1361	8. 43	·03290	23. 0	58·3	58·5
2. 37	38. 55	4. 46	·1366	9. 13	·03226			
3. 5	39. 0	5. 12	·1372	9. 23	·03238			
3. 22	38. 0	5. 44	·1354	9. 36	·03225			
3. 27	38. 10	6. 6	·1362	9. 55	·03245			
3. 41	36. 50	6. 14	·1353	10. 41	·03262			
4. 38	33. 55	6. 23	·1357	14. 23	·03296			
5. 23	33. 0	6. 27	·1353	16. 59	·03304			
5. 39	34. 55	6. 41	·1359	21. 22	·03307			
5. 51	33. 30	7. 6	·1344	23. 59	·03263			
5. 59	32. 30	7. 27	·1350					
6. 9	33. 15	7. 57	·1350					
6. 25	28. 25	8. 15	·1347					
6. 29	28. 40	8. 34	·1365					
6. 35	26. 25	8. 44	·1420					
6. 55	29. 35	8. 55	·1403					
6. 57	28. 25	9. 17	·1370					
7. 3	28. 30	9. 25	·1374					
7. 13	26. 35	9. 40	·1355					
7. 33	30. 30	9. 45	·1359					
7. 53	31. 35	9. 55	·1361					
8. 9	33. 30	10. 23	·1354					
8. 26	27. 30	11. 12	·1361					
8. 44	13. 30	12. 23	·1364					
8. 56	29. 25	12. 39	·1361					
9. 4	29. 0	20. 10	·1366					
9. 10	29. 35	21. 14	·1358					
9. 18	27. 15	23. 59	·1359					
9. 25	28. 40							
9. 40	23. 25							
9. 59	26. 30							
10. 9	26. 20							
10. 46	31. 10							
11. 9	31. 50							
11. 20	31. 20							
11. 34	32. 15							
	***							
12. 26	32. 40							
12. 58	33. 40							
13. 41	32. 45							
14. 16	33. 0							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 14								
h m	° ′ ″	h m		h m		h m	°	°
14. 37	20. 32. 35							
15. 7	32. 10							
15. 26	32. 45							
17. 14	31. 25							
17. 25	32. 0							
18. 54	31. 5							
20. 26	29. 15							
21. 8	28. 50							
21. 44	29. 25							
21. 56	30. 10							
22. 8	30. 0							
22. 17	31. 10							
22. 27	30. 55							
23. 26	34. 10							
23. 43	34. 10							
23. 59	35. 40							
Feb. 15		Feb. 15		Feb. 15		Feb. 15		
0. 0	20. 35. 40	0. 0	·1359	0. 0	·03263	0. 0	58 ·3	58 ·5
0. 26	36. 45	0. 20	·1360	0. 55	·03255	1. 0	58 ·3	58 ·0
0. 39	35. 20	0. 43	·1358	3. 12	·03257	2. 0	58 ·3	58 ·0
0. 56	36. 5	1. 22	·1365	11. 22	·03266	3. 0	57 ·8	58 ·0
1. 8	35. 5	1. 40	·1364	17. 35	·03411	9. 0	58 ·8	58 ·0
1. 24	36. 10	1. 52	·1367	21. 25	·03472	21. 0	63 ·0	64 ·1
1. 49	36. 5	2. 11	·1365	22. 46	·03443			
2. 4	35. 15	2. 35	·1371	23. 59	·03453			
	***	3. 26	·1371					
2. 59	36. 30	4. 10	·1365					
3. 41	34. 55	6. 51	·1370					
3. 55	34. 55	7. 12	·1369					
4. 28	33. 40	7. 23	·1371					
4. 47	33. 40	7. 55	·1368					
5. 4	33. 5	8. 12	·1369					
6. 16	32. 50	8. 43	·1364					
6. 26	33. 15	9. 0	·1369					
6. 40	32. 40	10. 3	·1361					
6. 59	33. 30	10. 22	·1365					
7. 24	32. 30	10. 40	·1363					
7. 38	33. 35	11. 3	·1371					
7. 51	33. 5	11. 24	·1364					
8. 10	31. 55	11. 42	·1368					
8. 23	32. 25	12. 6	·1364					
8. 38	32. 10	16. 13	·1362					
8. 50	30. 55	18. 49	·1367					
8. 59	31. 45	20. 12	·1364					
9. 14	31. 0	21. 41	·1356					
9. 26	31. 0	23. 59	·1356					
9. 42	30. 15							
10. 0	30. 35							
10. 36	30. 0							
10. 53:	30. 55							
11. 12	27. 50							
11. 19	27. 40							
11. 32	29. 50							
12. 51	31. 50							
13. 49	31. 15							
14. 25	31. 40							
15. 14	31. 20							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 15								
h m	° ′ ″	h m		h m		h m	°	°
15. 25	20. 32. 25							
15. 38	31. 40							
16. 26	30. 35							
17. 45	31. 5							
19. 59	29. 40							
20. 43	30. 5							
21. 37	30. 10							
22. 42	33. 25							
23. 59	36. 20							
Feb. 16		Feb. 16		Feb. 16		Feb. 16		
0. 0	20. 36. 20	0. 0	·1356	0. 0	·03453	1. 0	61 ·8	61 ·8
2. 9	38. 0	0. 25	·1359	0. 21	·03457	3. 0	61 ·1	60 ·6
2. 39	37. 0	1. 20	·1364	3. 12	·03443	9. 0	59 ·8	60 ·2
2. 56	36. 55	2. 13	·1367	4. 27	·03418	21. 0	58 ·7	58 ·8
3. 12	35. 55	2. 41	·1366	7. 5	·03400			
3. 42	35. 25	3. 43	·1371	8. 49	·03404			
3. 53	36. 15	3. 55	·1376	11. 52	·03363			
4. 28	36. 5	4. 26	·1373	12. 25	·03372			
5. 54	36. 30	4. 43	·1375	13. 12	·03356			
6. 35	38. 25	5. 26	·1372	13. 29	·03359			
7. 8	35. 55	5. 55	·1376	13. 54	·03342			
7. 33	37. 5	6. 32	·1376	14. 13	·03340			
8. 3	35. 40	7. 9	·1371	14. 38	·03323			
8. 18	33. 50	7. 22	·1375	15. 13	·03326			
8. 31	33. 40	7. 43	·1372	17. 18	·03320			
8. 40	32. 45	8. 12	·1367	18. 0	·03317			
9. 41	31. 30	8. 30	·1369	19. 9	·03300			
9. 53	32. 15	9. 6	·1373	21. 42	·03268			
10. 23	31. 30	9. 43	·1373	23. 59	·03243			
10. 29	31. 30	10. 11	·1378					
10. 48	29. 35	10. 25	·1377					
11. 26	29. 35	10. 41	·1380					
11. 44	27. 20	10. 55	·1374					
12. 36	30. 40	11. 19	·1374					
12. 48	30. 50	11. 25	·1379					
13. 15	29. 40	11. 41	·1370					
13. 40	32. 20	11. 53	·1377					
13. 51	30. 55	12. 10	·1369					
13. 56	32. 5	12. 22	·1366					
13. 59	31. 40	13. 10	·1375					
14. 36	34. 30	13. 25	·1371					
14. 52	32. 40	13. 43	·1375					
14. 59	33. 50	14. 26	·1366					
15. 10	33. 30	14. 45	·1367					
15. 25	36. 25	15. 9	·1371					
15. 42	31. 55	15. 19	·1369					
15. 56	30. 45	15. 41	·1372					
16. 11	30. 10	16. 44	·1373					
16. 23	30. 10	17. 56	·1365					
16. 30	29. 10	18. 43	·1378					
16. 44	30. 10	19. 25	·1375					
17. 8	30. 20	20. 10	·1365					
17. 23	29. 50	21. 4	·1372					
18. 1	33. 35	21. 38	·1361					
	***	21. 55	·1364					
19. 9	30. 55	23. 59	·1362					
	***							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 16								
h m	° ′ ″	h m		h m		h m	°	°
19. 51	20. 33. 10							
20. 0	32. 40							
20. 28	32. 40							
21. 24	31. 0							
21. 37	29. 40							
21. 42	29. 50							
21. 47	31. 0							
	* * *							
22. 32	32. 40							
22. 41	32. 30							
22. 55	32. 50							
23. 4	34. 40							
23. 13	34. 40							
23. 24	36. 5							
23. 30	35. 0							
23. 34	35. 40							
23. 42	35. 0							
23. 59	35. 35							
Feb. 17		Feb. 17		Feb. 17		Feb. 17		
0. 0	20. 35. 35	0. 0	·1362	0. 0	·03243	1. 0	58 ·5	58 ·0
0. 23	35. 55	0. 55	·1367	0. 59	·03253	3. 0	58 ·8	59 ·2
0. 30	36. 45	1. 11	·1364	3. 0	·03280	9. 0	57 ·8	57 ·0
0. 43	36. 35	2. 9	·1367	4. 22	·03288	21. 6	57 ·4	57 ·7
1. 15	37. 30	2. 23	·1372	7. 11	·03260			
2. 10	37. 10	2. 56	·1369	7. 42	·03266			
2. 25	36. 30	4. 21	·1374	8. 38	·03258			
2. 36	37. 30	5. 29	·1373	10. 41	·03256			
4. 9	35. 5	5. 43	·1371	11. 27	·03222			
4. 33	34. 40	5. 57	·1375	11. 41	·03235			
5. 3	35. 0	6. 49	·1376	12. 6	·03217			
5. 11	34. 35	7. 14	·1368	13. 29	·03232			
5. 53	33. 30	7. 29	·1372	16. 27	·03225			
5. 58	34. 20	7. 42	·1368	19. 24	·03213			
	* * *	8. 11	·1370	21. 24	·03197			
6. 35	34. 30	8. 29	·1364	22. 41	·03192			
6. 53	33. 40	8. 42	·1368	23. 59	·03204			
6. 57	33. 40	9. 10	·1360					
7. 23	31. 30	9. 30	·1353					
7. 38	32. 20	9. 47	·1359					
7. 54	30. 40	9. 57	·1355					
8. 4	30. 40	10. 9	·1358					
8. 16	31. 40	10. 14	·1352					
8. 38	20. 0	10. 41	·1360					
8. 47	19. 45	10. 58	·1379					
8. 56	17. 40	11. 8	·1377					
9. 1	18. 30	11. 14	·1380					
9. 6	17. 40	11. 38	·1372					
9. 34	23. 55	11. 53	·1383					
9. 43	23. 25	12. 25	·1365					
10. 9	27. 15	12. 41	·1369					
10. 13	26. 45	13. 0	·1366					
10. 34	29. 10	14. 57	·1372					
10. 43	26. 55	17. 11	·1375					
10. 56	27. 30	17. 47	·1374					
11. 8	26. 45	19. 14	·1378					
12. 51	31. 50	20. 11	·1374					
12. 57	31. 45	21. 52	·1363					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 17		Feb. 17						
h m	° ′ ″	h m		h m		h m	°	°
13. 15	20. 32. 55	22. 0	·1364					
	* * *	23. 59	·1371					
14. 28	33. 25							
14. 44	33. 55							
15. 10	32. 50							
15. 36	32. 30							
16. 9	33. 15							
16. 44	32. 55							
17. 6	31. 55							
17. 33	32. 5							
17. 41	31. 45							
19. 4	30. 50							
20. 16	29. 45							
21. 6	30. 0							
21. 56	31. 55							
22. 7	31. 30							
22. 42	32. 50							
22. 56	32. 35							
23. 51	35. 35							
23. 59	35. 35							
Feb. 18		Feb. 18		Feb. 18		Feb. 18		
0. 0	20. 35. 35	0. 0	·1371	0. 0	·03204	1. 0	58 ·4	58 ·3
0. 53	36. 55	1. 25	·1370	2. 41	·03252	9. 0	57 ·8	57 ·5
1. 57	36. 25	1. 36	·1373	9. 23	·03205	21. 0	58 ·8	59 ·0
2. 8	37. 25	1. 56	·1372	12. 7	·03221			
2. 25	35. 45	2. 8	·1376	13. 54	·03247			
2. 30	35. 25	2. 27	·1370	16. 25	·03264			
2. 33	36. 25	2. 36	·1373	18. 55	·03266			
2. 45	35. 0	2. 49	·1368	20. 24	·03272			
3. 17	34. 0	3. 12	·1371	23. 59	·03220			
4. 32	33. 10	3. 22	·1369					
5. 46	33. 35	3. 46	·1371					
9. 2	31. 30	3. 55	·1370					
9. 29	32. 5	4. 4	·1374					
10. 26	31. 40	4. 18	·1372					
11. 12	31. 55	4. 49	·1369					
11. 26	31. 25	6. 12	·1372					
11. 38	31. 25	8. 45	·1374					
11. 56	29. 55	10. 44	·1369					
12. 29	32. 0	11. 14	·1370					
13. 18	32. 10	11. 26	·1378					
13. 32	34. 30	11. 55	·1376					
14. 6	32. 5	12. 25	·1367					
14. 23	32. 35	14. 19	·1369					
15. 23	32. 30	18. 25	·1371					
16. 29	31. 5	19 10	·1368					
16. 53	31. 50	20. 53	·1367					
17. 4	31. 25	21. 39	·1361					
17. 38	31. 30	23. 12	·1359					
17. 55	30. 55	23. 25	·1352					
18. 4	31. 20	23. 39	·1357					
18. 25	30. 15	23. 59	·1361					
18. 29	31. 10							
18. 42	30. 40							
19. 23	30. 40							
19. 59	29. 45							
20. 9	30. 25							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 18								
h m	° ′ ″	h m		h m		h m	°	°
20. 29	20. 29. 30							
22. 6	30. 55							
23. 59	35. 25							
Feb. 19		Feb. 19		Feb. 19		Feb. 19		
0. 0	20. 35. 25	0. 0	·1361	0. 0	·03220	1. 0	59 ·2	59 ·2
0. 41	37. 0	0. 55	·1366	0. 32	·03229	3. 0	59 ·0	59 ·5
1. 56	37. 5	1. 29	·1364	4. 32	·03291	9. 0	59 ·0	59 ·6
2. 41	35. 30	1. 45	·1367	5. 11	·03280	21. 0	57 ·8	58 ·5
2. 46	37. 35	2. 42	·1368	5. 48	·03312			
	***	2. 46	·1387	7. 19	·03303			
3. 4	37. 0	2. 52	·1379	8. 21	·03318			
3. 18	37. 0	2. 56	·1381	8. 41	·03300			
3. 26	37. 40	3. 4	·1373	8. 52	·03311			
3. 40	36. 10	3. 25	·1382	8. 57	·03306			
4. 28	34. 25	3. 41	·1372	9. 5	·03308			
4. 49	35. 15	3. 45	·1376	10. 8	·03270			
5. 10	30. 0	3. 47	·1371	10. 36	·03270			
5. 21	28. 40	3. 55	·1377	10. 48	·03255			
5. 26	27. 0	3. 58	·1371	11. 8	·03257			
5. 44	28. 10		***	11. 22	·03264			
6. 20	32. 55	4. 25	·1372	11. 41	·03255			
6. 48	29. 55	4. 45	·1360	13. 4	·03260			
6. 57	29. 55	5. 0	·1348	13. 16	·03252			
7. 8	28. 40	5. 15	·1347	16. 24	·03255			
7. 13	28. 20	5. 44	·1356	19. 57	·03238			
7. 38	28. 55	6. 11	·1360	23. 59	·03204			
7. 47	27. 50	6. 29	·1358					
8. 4	27. 5	6. 56	·1367					
8. 19	28. 40	7. 7	·1361					
	***	7. 10	·1364					
8. 30	28. 25		***					
8. 41	29. 10	7. 43	·1352					
8. 50	28. 15	7. 46	·1357					
8. 57	29. 5	7. 58	·1351					
9. 15	27. 15	8. 15	·1368					
9. 37	28. 25	8. 20	·1365					
9. 44	27. 0	8. 26	·1368					
9. 55	27. 10	8. 34	·1356					
10. 4	25. 10	8. 41	·1363					
10. 25	26. 40	8. 45	·1358					
10. 41	23. 25	8. 59	·1364					
10. 45	24. 0	9. 45	·1360					
10. 54	25. 30	9. 55	·1362					
11. 7	25. 40	10. 12	·1348					
11. 25;	29. 35	10. 30	·1367					
11. 38	28. 25	10. 40	·1368					
11. 41	29. 55	11. 13	·1356					
	***	11. 21	·1368					
13. 8	34. 55	11. 27	·1364					
13. 25	33. 40	11. 30	·1366					
13. 30	34. 5	11. 43	·1359					
	***	11. 53	·1362					
13. 50	33. 10	12. 0	·1359					
13. 57	33. 40	12. 15	·1364					
14. 12	32. 40	12. 41	·1363					
14. 25	33. 40	13. 0	·1372					
14. 42	33. 10	13. 25	·1366					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 19		Feb. 19						
h m	° ′ ″	h m		h m		h m	°	°
14. 56	20. 34. 5	13. 41	·1368					
15. 1	31. 55	13. 57	·1367					
15. 13	33. 40	14. 11	·1363					
15. 26	32. 35	15. 13	·1367					
	***	15. 22	·1372					
16. 43	32. 55	15. 40	·1370					
17. 8	31. 45	15. 45	·1375					
17. 22	31. 45	15. 50	·1369					
17. 32	30. 35	15. 55	·1374					
17. 41	31. 30	15. 59	·1369					
17. 46	30. 45	16. 1	·1374					
	***		***					
19. 18	30. 35	16. 36	·1373					
19. 26	29. 40	17. 6	·1368					
19. 39	30. 15	17. 30	·1371					
19. 54	29. 45	17. 41	·1369					
20. 2	28. 15	18. 12	·1373					
20. 14	29. 20	18. 26	·1370					
20. 37	29. 20	18. 41	·1375					
20. 43	28. 40		***					
21. 26	29. 50	20. 6	·1367					
21. 58	31. 50	20. 15	·1372					
22. 23	32. 20		***					
22. 27	33. 35	21. 57	·1355					
22. 57	33. 40	22. 12	·1350					
23. 7	35. 5	22. 27	·1353					
23. 12	34. 55	22. 55	·1344					
23. 23	36. 55	23. 12	·1353					
23. 45	37. 50	23. 59	·1355					
23. 59	37. 50							
Feb. 20		Feb. 20		Feb. 20		Feb. 20		
0. 0	20. 37. 50	0. 0	·1355	0. 0	·03204	1. 0	58 ·8	60 ·0
0. 24	37. 30	0. 12	·1349	2. 58	·03277	3. 0	59 ·0	60 ·1
0. 59	37. 45	0. 50	·1353	7. 40	·03303	9. 0	59 ·3	59 ·4
1. 12	38. 50	0. 55	·1350	8. 59	·03282	21. 0	59 ·5	59 ·6
1. 19	37. 30	1. 8	·1362	10. 34	·03282	22. 0	59 ·5	59 ·6
1. 41	37. 15	1. 12	·1356	10. 41	·03298	23. 0	59 ·2	59 ·3
1. 53	38. 50	1. 23	·1359	10. 54	·03280			
2. 12	38. 10	1. 34	·1355	12. 8	·03280			
2. 24	36. 55	1. 45	·1359	12. 14	·03275			
2. 33	36. 25	2. 6	·1354	12. 26	·03280			
2. 49	36. 25	3. 11	·1371	12. 38	·03280			
3. 9	36. 30	3. 49	·1364	12. 40	·03259			
3. 26	36. 50	5. 15	·1367	13. 6	·03280			
4. 38	34. 0	5. 26	·1365	13. 26	·03261			
5. 26	33. 20	5. 43	·1368	13. 47	·03223			
5. 33	33. 45	5. 54	·1365	14. 6	·03208			
5. 41	33. 40	6. 11	·1366	14. 19	·03215			
5. 50	32. 30	6. 23	·1360	14. 26	·03202			
5. 56	33. 55	6. 55	·1354	14. 41	·03208			
6. 10	33. 5	7. 35	·1364	14. 51	·03229			
6. 29	33. 20	7. 41	·1368	15. 0	·03205			
6. 57	30. 55	7. 45	·1364	15. 14	·03203			
7. 8	28. 50	8. 11	·1364	15. 41	·03223			
7. 19	28. 25	8. 36	·1368	15. 57	·03245			
7. 25	28. 35	9. 55	·1365	16. 12	·03218			
8. 11	32. 40	10. 30	·1367	16. 24	·03227			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Feb. 20		Feb. 20		Feb. 20				
h m	° ′ ″	h m		h m		h m	°	°
8. 32	20. 32. 25	10. 37	·1384	16. 40	·03278			
9. 8	32. 40	10. 40	·1380	16. 42	·03160			
10. 41	31. 30	10. 45	·1386	16. 49	·02200			
10. 44	33. 10	11. 21	·1372	16. 53	·02542			
11. 5	31. 55	11. 39	·1369	16. 59	·02858			
11. 12	32. 5		* * *	17. 8	·02672			
11. 15	31. 0	12. 3	·1376	17. 12	·02440			
11. 39	30. 20	12. 13	·1368	17. 16	·02677			
11. 42	31. 10	12. 34	·1384	17. 26	·02844			
11. 56	31. 10	12. 39	·1360	17. 38	·02858			
12. 8	32. 0	12. 50	·1375	17. 41	·02920			
12. 14	30. 40	12. 55	·1371	17. 44	·02907			
12. 45	31. 25	13. 12	·1374	17. 54	·02923			
12. 51	34. 45	13. 22	·1385	17. 59	·02837			
12. 56	30. 15	13. 39	·1374	18. 6	·02724			
12. 59	31. 10	13. 45	·1376	18. 9	·02785			
13. 8	30. 15	14. 0	·1367	18. 16	·02744			
13. 35	40. 40	14. 9	·1373	18. 26	·02800			
13. 55	42. 40	14. 11	·1366	18. 31	·02816			
14. 8	40. 50	14. 17	·1384	18. 37	·02768			
14. 19	38. 10	14. 26	·1368	18. 43	·02818			
14. 23	36. 10	14. 40	·1376	18. 52	·02789			
14. 33	34. 15	14. 53	·1397	18. 59	·02869			
14. 38	37. 20	15. 12	·1376	19. 13	·02805			
14. 42	33. 10	15. 25	·1370	19. 19	·02884			
14. 44	34. 5	15. 41	·1358	19. 27	·02917			
14. 56	32. 15	15. 59	·1381	19. 40	·02800			
15. 10	36. 5	16. 12	·1352	19. 54	·02858			
15. 38	30. 10	16. 15	·1368	19. 59	·02826			
15. 41	25. 30	16. 18	·1348	20. 29	·03107			
15. 44	28. 45	16. 30	·1379	20. 38	·03170			
15. 51	24. 50	16. 36	·1244	21. 46	·03429			
16. 9	30. 45		(†)	22. 24	·03419			
16. 15	22. 10	17. 30	·1244	22. 49	·03474			
16. 21	32. 50	17. 35	·1251	22. 58	·03460			
16. 24	28. 30	17. 40	·1244	23. 7	·03478			
16. 36	20. 44. 55	17. 42	·1249	23. 11	·03452			
16. 40	21. 14. 5		(†)	23. 15	·03476			
	(†)	18. 11	·1244	23. 17	·03449			
16. 46	21. 14. 5	18. 14	·1283	23. 21	·03465			
16. 51	20. 56. 20	18. 21	·1265	23. 25	·03429			
16. 58	21. 14. 5	18. 25	·1244	23. 33	·03463			
	(†)		(†)	23. 59	·03444			
17. 10	21. 9. 10	20. 14	·1244					
17. 13	20. 30. 10	20. 17	·1253					
17. 23	39. 10	20. 27	·1245					
17. 41	40. 25	20. 34	·1261					
17. 51	50. 15	20. 42	·1247					
17. 55	44. 10	20. 45	·1265					
17. 59	41. 25	20. 52	·1247					
18. 4	55. 0	21. 15	·1304					
18. 9	20. 52. 30	21. 25	·1297					
18. 13	21. 3 30		* * *					
18. 23	20. 53. 55	22. 24	·1318					
18. 26	20. 51. 5	22. 30	·1306					
18. 32	21. 0. 10	22. 38	·1319					
18. 40	20. 58. 30	22. 41	·1298					
18. 49	41. 45	22. 45	·1310					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers Of H.F. Magnet.	Readings of Thermometers Of V.F. Magnet.
Feb. 20		Feb. 20						
h m	° ′ ″	h m		h m		h m	°	°
18. 59	20. 51. 20	22. 54	·1305					
19. 6	35. 45	22. 57	·1316					
19. 13	20. 45. 10	23. 11	·1304					
19. 24	21. 14. 5	23. 12	·1309					
	(†)	23. 19	·1294					
19. 32	21. 14. 5	23. 27	·1315					
19. 38	20. 53. 25	23. 30	·1311					
19. 40	54. 50	23. 35	·1317					
19. 41	50. 55	23. 40	·1310					
19. 43	20. 53. 15	23. 59	·1313					
19. 51	21. 2. 55							
19. 56	20. 48. 55							
19. 58	37. 10							
20. 4	48. 15							
20. 5	34. 30							
20. 9	45. 0							
20. 11	27. 10							
20. 12	35. 30							
20. 13	19. 50							
20. 21	39. 30							
20. 24	26. 40							
20. 28	43. 40							
20. 30	34. 20							
20. 44	48. 0							
20. 52	38. 30							
21. 6	18. 40							
21. 15	23. 0							
21. 30	18. 20							
21. 31	22. 20							
21. 40	19. 0							
21. 42	24. 30							
21. 46	15. 50							
21. 51	31. 40							
22. 0	25. 30							
22. 7	31. 30							
22. 12	27. 40							
22. 26	35. 10							
22. 32	31. 15							
22. 37	34. 5							
22. 39	30. 50							
22. 43	33. 40							
22. 47	30. 30							
22. 58	35. 20							
23. 10	32. 20							
23. 12	34. 0							
23. 20	29. 20							
23. 26	30. 30							
23. 39	30. 50							
23. 45	29. 30							
23. 47	32. 0							
23. 59	31. 10							
Feb. 21		Feb. 21		Feb. 21		Feb. 21		
0. 0	20. 31. 10	0. 0	·1313	0. 0	·03444	0. 0	59·1	58·7
0. 7	31. 0	0. 18	·1307	0. 24	·03423	1. 0	59·0	58·3
0. 16	32. 55	0. 22	·1314	0. 54	·03443	2. 0	59·0	58·6
0. 35	32. 30	0. 41	·1310	1. 5	·03437	3. 0	58·8	58·9
0. 44	34. 35	0. 55	·1322	1. 53	·03440	9. 0	59·8	59·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

February 20. The photographic trace for Declination was off the sheet in the direction of *increasing* Declination, from 16h. 40m. to 16h. 46m., from 16h. 58m. to 17h. 10m., and from 19h. 24m. to 19h. 32m.; and that for Horizontal Force was off the sheet in the direction of *diminishing* force from 16h. 36m. to 17h. 30m., from 17h. 42m. to 18h. 11m., and from 18h. 25m. to 20h. 14m.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 21		Feb. 21		Feb. 21		Feb. 21		
h m	° ′ ″	h m		h m		h m	°	°
0. 53	20. 33. 55	1. 11	·1297	1. 58	·03423	21. 0	58 ·8	59 ·0
0. 58	36. 50	1. 28	·1313	2. 12	·03427	22. 0	58 ·5	58 ·9
1. 15	34. 55	1. 52	·1317		***	23. 0	58 ·3	58 ·5
	***	1. 57	·1310	2. 21	·03476			
1. 37	36. 55	2. 26	·1368	2. 40	·03445			
1. 42	35. 40	2. 35	·1338	3. 12	·03562			
1. 46	38. 20	2. 43	·1320	3. 24	·03668			
1. 53	35. 40	2. 57	·1356	3. 28	·03653			
2. 6	38. 50	3. 18	·1370	3. 46	·03940			
2. 10	36. 10	3. 26	·1388	3. 56	·03900			
2. 28	38. 55	3. 32	·1376	4. 2	·04000			
2. 30	36. 50	3. 54	·1409	4. 9	·03963			
2. 42	41. 30	3. 57	·1463	4. 16	·03946			
2. 54	34. 10	4. 7	·1367	4. 20	·03997			
3. 9	37. 50	4. 13	·1396	4. 26	·04210			
3. 20	24. 55	4. 22	·1417	4. 38	·03968			
3. 24	32. 50	4. 24	·1374	4. 41	·04006			
3. 28	31. 50	4. 32	·1385	4. 46	·03993			
3. 36	36. 50	4. 41	·1369	4. 48	·03997			
3. 42	16. 55	4. 42	·1375	4. 57	·03849			
3. 46	50. 50	4. 50	·1343	5. 6	·03977			
3. 56	22. 5	5. 0	·1308	5. 12	·03808			
3. 59	21. 20	5. 10	·1317	5. 20	·03728			
4. 14	46. 50	5. 13	·1323	5. 28	·03689			
4. 25	11. 15	5. 20	·1299	5. 40	·03678			
4. 30	26. 50	5. 23	·1304	6. 14	·03558			
4. 32	23. 15	5. 29	·1292	6. 23	·03507			
4. 42	34. 10	5. 43	·1322	6. 35	·03537			
4. 45	27. 10	5. 45	·1292	6. 50	·03526			
4. 58	36. 5	5. 53	·1309	7. 0	·03511			
5. 1	16. 55	6. 9	·1355	7. 15	·03480			
5. 10	22. 20	6. 13	·1306	7. 40	·03460			
5. 14	31. 40	6. 19	·1290	8. 6	·03460			
5. 19	33. 10	6. 30	·1316	8. 34	·03448			
5. 21	32. 15	6. 39	·1310	10. 55	·03417			
5. 25	35. 50	6. 43	·1320	13. 36	·03420			
5. 33	28. 50	6. 54	·1309	13. 44	·03412			
5. 39	23. 15	6. 57	·1317	18. 24	·03384			
5. 44	32. 20	7. 9	·1312		***			
5. 51	19. 25	7. 18	·1321	20. 27	·03360			
5. 54	20. 0	7. 30	·1315		*			
5. 57	13. 45	7. 52	·1316	21. 24	·03364			
6. 12	43. 0	7. 56	·1321	22. 54	·03340			
6. 27	25. 25	8. 12	·1324	23. 59	·03343			
6. 38	30. 40	8. 26	·1320					
6. 43	29. 10	10. 50	·1324					
6. 51	34. 55	10. 57	·1322					
6. 58	34. 30	13. 25	·1324					
7. 1	35. 20	13. 41	·1330					
7. 12	31. 50	13. 56	·1324					
7. 24	35. 50	17. 11	·1329					
7. 36	34. 35	18. 26	·1327					
7. 42	34. 25	19. 22	·1331					
7. 54	33. 0	19. 53	·1345					
8. 1	34. 25		***					
8. 13	35. 15	20. 41	·1328					
8. 34	33. 10	21. 11	·1333					
8. 40	33. 30	21. 33	·1330					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 21		Feb. 21						
h m	° ′ ″	h m		h m		h m	°	°
9. 11	20. 32. 35	22. 52	·1333					
9. 26	33. 30	23. 11	·1327					
9. 42	32. 55	23. 34	.1334					
10. 10	33. 25	23. 59	·1333					
10. 34	33. 5							
10. 43	32. 0							
13. 26	32. 20							
13. 28	31. 30							
13. 47	33. 35							
14. 13	31. 50							
14. 42	32. 0							
15. 10	30. 45							
16. 45	30. 30							
17. 9	31. 15							
17. 23	30. 25							
18. 24	30. 30							
18. 39	30. 0							
18. 43	30. 40							
19. 13	29. 40							
19. 26	32. 40							
19. 30	26. 0							
19. 34	30. 25							
19. 39	26. 50							
19. 50	30. 20							
19. 55	29. 55							
20. 6	31. 40							
20. 18	29. 0							
20. 25	34. 25							
20. 36	29. 55							
20. 39	33. 45							
20. 53	30. 20							
21. 0	34. 0							
21. 12	32. 20							
21. 21	35. 50							
21. 26	33. 40							
	***							
22. 39	33. 35							
23. 5	35. 0							
23. 14	34. 30							
	***							
23. 59	35. 25							
Feb. 22		Feb. 22		Feb. 22		Feb. 22		
0. 0	20. 35. 25	0. 0	·1333	0. 0	·03343	1. 0	58 ·8	59 ·0
0. 51	35. 10	0. 26	·1337	3. 7	{·03392	2. 0	58 ·8	59 ·0
1. 9	35. 35	0. 52	·1334		·03338	3. 0	58 ·8	59 ·0
1. 40	35. 0	1. 11	·1338	13. 26	·03344	9. 0	58 ·8	59 ·0
2. 4	35. 30	1. 15	·1334	13. 50	·03337	21. 0	59 ·0	59 ·1
2. 21	34. 55	1. 54	·1336	16. 23	·03339			
2. 30	35. 10	2. 5	·1340	18. 52	·03337			
3. 4	34. 30	2. 16	·1340		***			
3. 12	35. 50	2. 25	·1343	21. 18	·03320			
3. 21	34. 40	3. 3	·1338	22. 32	·03310			
4. 2	34. 10	3. 13	·1349	22. 44	·03297			
4. 30	33. 0	3. 24	·1341	23. 59	·03298			
5. 23	33. 10	3. 59	·1343					
5. 59	32. 25	4. 25	·1339					
6. 49	33. 15	5. 26	·1343					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁏ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 22		Feb. 22						
h m	° ′ ″	h m		h m		h m	°	°
6. 55	20. 32. 35	5. 43	·1341					
7. 44	32. 30	7. 6	·1345					
8. 6	33. 0	8. 26	·1341					
8. 13	32. 25	8. 42	·1344					
8. 57	32. 30	8. 55	·1342					
9. 9	30. 30	9. 6	·1345					
9. 25	30. 40	9. 25	·1339					
9. 50:	32. 30	9. 41	·1341					
10. 52	32. 0	10. 59	·1342					
10. 58	32. 30	11. 10	·1346					
11. 25	31. 0	11. 23	·1340					
11. 36	31. 40	11. 44	·1347					
13. 28	31. 55	12. 11	·1340					
13. 39	34. 50	13. 18	·1336					
13. 58	31. 55	13. 36	·1340					
14. 42	32. 10	14. 9	·1337					
16. 58	31. 30	18. 44	·1341					
17. 10	30. 40	19. 12	·1348					
17. 38	30. 30	19. 25	·1345					
17. 57	31. 35	19. 41	·1348					
18. 33	31. 15	19. 56	·1344					
18. 41	30. 10	20. 12	·1346					
18. 47	32. 25	20. 57	·1337					
19. 3	30. 25	21. 11	·1339					
	***	22. 40	·1347					
20. 8	29. 40	22. 45	·1342					
20. 26	30. 15	23. 59	·1345					
20. 56	29. 40							
21. 26	30. 5							
21. 38	29. 25							
22. 7	31. 10							
22. 11	29. 35							
22. 16	31. 25							
22. 28	32. 20							
22. 41	31. 15							
23. 4	31. 40							
23. 26	33. 30							
23. 59	35. 25							
Feb. 23		Feb. 23		Feb. 23		Feb. 23		
0. 0	20. 35. 25	0. 0	·1345	0. 0	·03298	1. 0	60 ·3	59 ·7
	***	0. 26	·1350	1. 12	·03317	3. 0	59 ·5	59 ·4
1. 44	36. 30	0. 56	·1346	2. 41	·03320	9. 0	59 ·3	59 ·0
1. 51	37. 50	1. 30	·1354	4. 19	·03346	21. 0	57 ·8	57 ·0
2. 4	38. 10	1. 49	·1350	4. 29	·03338			
2. 26	37. 25	1. 54	·1354	4. 41	·03340			
2. 42	37. 50	2. 11	·1359	4. 45	·03336			
3. 0	37. 30	2. 28	·1354	5. 12	·03343			
3. 14	37. 35	2. 46	·1357	5. 40	·03340			
3. 26	38. 25	3. 20	·1352	6. 0	·03358			
3. 34	38. 15	3. 49	·1355	6. 23	·03360			
3. 54	36. 30	3. 55	·1351	6. 49	·03402			
4. 9	37. 55	4. 8	·1353	7. 9	·03358			
4. 20	37. 0	4. 12	·1358	7. 35	·03364			
4. 29	37. 30	4. 25	·1344		***			
4. 38	36. 30	4. 30	·1350	8. 42	·03412			
4. 55	36. 0	4. 41	·1344	9. 30	·03336			
5. 6	36. 30	4. 53	·1351	9. 42	·03341			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 23		Feb. 23		Feb. 23				
h m	° ′ ″	h m		h m		h m	°	°
5. 38	20. 36. 0	5. 0	·1356	9. 57	·03266			
5. 51	36. 35	5. 23	·1354	10. 14	·03293			
5. 56	35. 25	5. 56	·1365	10. 24	·03243			
6. 7	35. 40	6. 7	·1350	10. 43	·03184			
6. 12	29. 0	6. 22	·1338	10. 59	·03215			
6. 23	17. 30	6. 43	·1388	11. 21	·03176			
6. 38	10. 50	7. 2	·1351	11. 36	·03214			
6. 50	16. 40	7. 11	·1353	12. 1	·03235			
6. 59	12. 35	7. 19	·1338	12. 18	·03236			
7. 3	12. 35	7. 41	·1322	12. 36	·03240			
7. 11	10. 50	7. 43	·1327	13. 6	·03276			
7. 19	13. 50	8. 7	·1322	13. 29	·03283			
7. 23	13. 50	8. 11	·1324	14. 25	·03288			
7. 29	15. 50	8. 29	·1305	14. 36	·03270			
7. 36	14. 50	8. 41	·1318	14. 54	·03284			
7. 40	14. 40	9. 12	·1324	15. 30	·03292			
7. 42	12. 45	9. 34	·1315	15. 43	·03277			
7. 49	13. 0	9. 43	·1343	15. 57	·03283			
7. 55	12. 30	10. 11	·1305	18. 24	·03278			
8. 9	13. 5	10. 16	·1352	19. 27	·03268			
8. 25	23. 5	10. 30	·1333	19. 53	·03241			
8. 45	18. 0	10. 37	·1335	21. 5	·03243			
9. 2	17. 55	10. 41	·1332	22. 49	·03216			
9. 17	19. 15	10. 55	·1375	23. 59	·03206			
9. 33	18. 55	11. 27	·1301					
9. 56	40. 15	11. 43	·1320					
10. 12	20. 15	12. 11	·1344					
10. 23	30. 45	12. 26	·1332					
10. 29	25. 30	12. 34	·1336					
10. 37	24. 40	12. 41	·1328					
10. 45	17. 55	12. 57	·1332					
10. 59	36. 0	13. 13	·1337					
11. 11	39. 40	13. 26	·1333					
11. 29	23. 30	13. 41	·1338					
11. 36	22. 40	14. 12	·1337					
11. 46	23. 10	14. 24	·1342					
11. 56	25. 20	14. 33	·1337					
12. 4	25. 5	14. 41	·1345					
12. 9	27. 10	14. 49	·1335					
12. 13	26. 40	15. 27	·1338					
12. 33	28. 40	15. 41	·1346					
12. 49	27. 50	15. 55	·1338					
12. 54	28. 55	16. 24	·1345					
12. 59	28. 55	16. 43	·1343					
13. 12	31. 15	18. 27	·1354					
13. 19	30. 20	18. 40	·1343					
13. 27	30. 20	18. 57	·1337					
13. 37	32. 15	19. 24	·1349					
13. 47	32. 25	19. 36	·1360					
13. 56	31. 45	19. 55	·1350					
14. 8	31. 25	20. 9	·1345					
14. 15	32. 55	20. 57	·1347					
14. 23	31. 50	21. 11	·1354					
14. 29	31. 50	22. 34	·1352					
14. 38	28. 30	23. 45	·1357					
15. 8	30. 10	23. 50	·1350					
15. 11	29. 40	23. 55	·1353					
15. 27	29. 40	23. 58	·1320					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb.23		Feb.23						
h m	° ′ ″	h m		h m		h m	°	°
15.35	20.31.10	23.59	·1323					
15.41	27.10							
15.51	29.50							
15.59	31.10							
16.13	29.30							
16.17	30.50							
16.37	31. 0							
17.27	32.35							
17.33	31.45							
	***							
18. 9	31.25							
18.12	33. 5							
18.20	32. 5							
18.29	36.25							
18.36	35.10							
18.41	36.25							
18.56	35.30							
19.11	36.40							
19.27	43.25							
19.39	40.40							
19.43	38.20							
19.55	39.20							
20.23	37.40							
20.26	36.10							
20.56	34.30							
21.24	34.35							
21.41	33.10							
21.54	33.20							
22. 6	32.40							
22.28	33.25							
22.41	34.30							
23.11	35.30							
23.39	38.25							
23.55	43.20							
23.59	39.30							
Feb.24		Feb.24		Feb.24		Feb.24		
0. 0	20.39.30	0. 0	·1324	0. 0	·03206	1. 0	58·2	57·8
0.14	45.10	0.25	·1356	0. 7	·03206	3. 0	58·3	58·0
0.30	42. 5	0.41	·1350	0.14	·03225	9. 0	58·3	58·0
0.42	45.10	0.49	·1364	0.29	·03222	22. 0	58·0	57·7
	***	0.57	·1356		***			
1. 3	40.10	1. 8	·1343	0.45	·03246			
1.20	39.50	1.21	·1339	0.49	·03230			
1.28	36.45	1.25	·1316	0.56	·03242			
1.40	37.40	1.41	·1323	0.59	·03227			
	***	2.11	·1343	1.21	·03246			
2. 9	36. 5	2.29	·1357	1.26	·03223			
	***	2.55	·1344	2. 0	·03255			
2.38	36.40	3.23	·1351	2.14	·03263			
3.25	34.35	3.43	·1356		***			
3.39	34. 5	3.53	·1363	2.51	·03258			
3.44	34.40	3.58	·1354	3. 7	·03252			
4. 8	33.15	4.11	·1347	4.39	·03277			
4.41	33.25	4.24	·1359	6.36	·03263			
5.26	32.30	4.53	·1354	7.32	·03252			
6.10	32.35	6.11	·1356	7.42	·03260			
6.12	32. 0	6.22	·1374	7.52	·03255			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb.24		Feb.24		Feb.24				
h m	° ′ ″	h m		h m		h m	°	°
6.16	20.30.15	6.29	·1366	8.54	·03295			
6.31	33.55	6.51	·1388	9.29	·03262			
6.37	32.40	6.55	·1377	9.41	·03300			
6.46	31.45	7. 0	·1383	9.44	·03278			
6.51	33.25	7. 7	·1375	9.51	·03305			
6.58	33.20	7.13	·1371	9.59	·03277			
7.14	35.15	7.24	·1358	10.11	·03286			
7.26	33.10	7.39	·1370	10.29	·03263			
7.37	33.40	7.42	·1366	11.58	·03266			
7.41	33.20	7.52	·1383	12.26	·03243			
7.51	35.30	7.56	·1364	12.45	·03256			
8. 5	33.25	8. 0	·1370	13.13	·03243			
8.13	37.10	8.12	·1377	13.26	·03256			
8.21	31.10	8.27	·1352	13.38	·03220			
8.29	31.10	9. 0	·1367	13.46	·03222			
8.51	26.10	9.12	·1356	13.55	·03204			
8.59	26.30	9.18	·1360	13.59	·03219			
9. 9	22.50	9.36	·1342	14. 3	·03202			
9.16	23. 5	9.41	·1352	14.14	·03237			
9.26	18. 0	9.43	·1345	14.53	·03215			
9.29	19.50	9.52	·1358	15.12	·03214			
9.39	18.10	10. 3	·1351	15.52	·03204			
9.42	19.45	10.12	·1365	16.12	·03209			
9.45	15.55	10.26	·1350	16.56	·03216			
9.48	15.40	10.30	·1352	17.23	·03225			
9.54	14.20	10.43	·1332	21.20	·03218			
9.56	14.55	10.53	·1337		* *			
10. 6	20.30	11.11	·1342	22.54	·03200			
10.11	22.10	11.17	·1336	23.59	·03196			
10.16	20.20	11.36	·1342					
10.31	23.40	11.44	·1358					
10.39	18.35	11.58	·1364					
10.53	20.50	12.18	·1354					
11. 2	25. 0	12.25	·1344					
11.10	25. 0	12.41	·1340					
12.20	33.30	12.52	·1343					
12.49	30.10	13.22	·1333					
12.57	27.45	13.30	·1341					
13.10	25.45	13.41	·1336					
13.16	29.20	13.45	·1338					
13.20	28.20	13.56	·1326					
13.36	35.30	14. 0	·1334					
13.44	29.55	14. 3	·1326					
13.52	30.40	14.11	·1335					
13.56	30. 0	14.21	·1333					
13.59	25.50	14.41	·1352					
14. 7	27. 5	14.57	·1347					
14.12	20.55	15.26	·1348					
14.26	28. 5	15.45	·1341					
14.38	27.30	15.56	·1343					
14.47	29.40	16. 9	·1339					
15. 5	29.40	16.13	·1344					
15.36:	34.50	16.22	·1340					
15.59	32.25	16.53	·1346					
16. 9	30.25	17.16	·1345					
16.18	31.25	17.23	·1350					
16.23	29.55	17.30	·1347					
16.26	30.10	17.41	·1354					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb.24		Feb.24						
h m	° ′ ″	h m		h m		h m	°	°
16. 29	20. 28. 0	17. 52	·1352					
16. 51	26. 0	17. 58	·1358					
17. 14	29. 30	18. 10	·1351					
	* * *		* * *					
17. 46	27. 30	18. 40	·1355					
17. 52	28. 10	18. 44	·1360					
18. 29	27. 50		* * *					
19. 13	29. 40	20. 16	·1352					
19. 19	28. 10	20. 24	·1357					
19. 27	29. 5	20. 27	·1366					
19. 52	28. 35	20. 41	·1356					
20. 9	29. 10	21. 12	·1351					
20. 14	27. 45	21. 45	·1356					
20. 26	28. 35		* * *					
20. 28	30. 55	22. 56	·1341					
20. 32	30. 10	23. 0	·1342					
21. 4	31. 15	23. 54	·1353					
21. 13	30. 20	23. 59	·1354					
21. 17	31. 50							
21. 27	32. 10							
21. 38	30. 45							
21. 51	32. 55							
22. 9	32. 30							
22. 20	33. 55							
22. 36	33. 30							
22. 57	36. 25							
23. 2	35. 30							
23. 27	35. 30							
23. 55	37. 10							
23. 59	36. 35							
Feb.25		Feb.25		Feb.25		Feb.25		
0. 0	20. 36. 35	0. 0	·1354	0. 0	·03196	0. 30	58 ·6	58 ·5
0. 26	36. 30	0. 13	·1358	1. 52	·03203	9. 0	56 ·7	55 ·7
0. 35	37. 20	0. 36	·1365	1. 55	·03232	21. 0	56 ·2	56 ·0
0. 40	36. 50	0. 56	·1362	2. 10	·03195			
0. 56	38. 0	1. 42	·1372	2. 24	·03205			
1. 12	38. 30	1. 52	·1406	2. 39	·03190			
1. 19	37. 50	2. 7	·1388	2. 45	·03206			
1. 43	38. 35	2. 14	·1395	2. 55	·03186			
1. 46	36. 10	2. 40	·1377	3. 14	·03258			
1. 48	46. 20	2. 54	·1364	3. 28	·03298			
1. 52	43. 30	3. 0	·1378	3. 44	·03260			
1. 59	41. 50	3. 12	·1364	3. 52	·03273			
2. 17	44. 15	3. 24	·1394	3. 56	·03258			
2. 32	43. 10	3. 36	·1305	4. 22	·03280			
2. 39	46. 40	3. 42	·1321	4. 41	·03232			
2. 49	48. 5	3. 49	·1311	4. 45	·03243			
2. 53	44. 15	4. 9	·1363	4. 54	·03207			
2. 57	47. 55	4. 19	·1389	5. 10	·03217			
3. 3	45. 30	4. 26	·1366		* * *			
3. 6	49. 55	4. 36	·1384	5. 29	·03212			
3. 16	40. 20	4. 46	·1362		* * *			
3. 29	53. 10	5. 0	·1387	5. 43	·03249			
3. 43	36. 20	5. 11	·1388	5. 44	·03219			
3. 49	34. 50	5. 13	·1416	5. 53	·03277			
4. 6	29. 25	5. 15	·1388	5. 55	·03253			
4. 27	40. 30	5. 21	·1408	5. 59	·03342			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb.25		Feb.25		Feb.25				
h m	° ′ ″	h m		h m		h m	°	°
4. 31	20. 38. 50	5. 24	·1399	6. 15	·03500			
4. 40	41. 50	5. 36	·1445	6. 25	·03556			
4. 53	37. 35	5. 39	·1357	6. 32	·03424			
	* * *	5. 42	·1414	6. 38	·03434			
5. 23	43. 10	5. 50	·1355	6. 40	·03438			
5. 28	42. 15	6. 6	·1392	6. 43	·03382			
5. 42	57. 45	6. 12	·1376	7. 7	·03320			
5. 45	46. 0	6. 18	·1331	7. 11	·03290			
5. 51	49. 20	6. 22	·1360	7. 13	·03306			
5. 59	39. 35	6. 27	·1333	7. 23	·03267			
6. 7	43. 50	6. 35	·1365	7. 26	·03292			
6. 21	34. 25	6. 38	·1354	7. 33	·03262			
6. 32	14. 10	6. 40	·1360	7. 38	·03277			
6. 40	20. 40	6. 43	·1344	7. 44	·03244			
6. 47	15. 40	6. 48	·1363	7. 57	·03230			
7. 2	29. 45	6. 52	·1360	8. 0	·03263			
7. 6	24. 30	6. 56	·1380	8. 11	·03221			
7. 13	34. 55	7. 3	·1360	8. 12	·03246			
7. 16	34. 55	7. 11	·1376	8. 16	·03219			
7. 25	39. 55	7. 13	·1349	8. 24	·03228			
7. 37	41. 50	7. 19	·1368	8. 36	·03185			
	* * *	7. 25	·1356	8. 41	·03192			
8. 5	39. 30	7. 29	·1383	8. 52	·03217			
8. 12	42. 20	7. 40	·1362	8. 54	·03173			
8. 25	39. 30	7. 43	·1363	8. 59	·03523			
8. 40	30. 10	7. 47	·1347	9. 4	·03523			
8. 45	29. 15	7. 53	·1398	9. 12	·03426			
8. 52	31. 50	7. 55	·1374	9. 26	·03364			
8. 58	27. 20	7. 59	·1393	9. 30	·03364			
9. 0	30. 10	8. 1	·1370	9. 40	·03324			
9. 3	25. 25	8. 9	·1392	9. 45	·03326			
9. 9	25. 25	8. 14	·1360	9. 54	·03303			
9. 15	19. 20	8. 24	·1339	10. 8	·03312			
9. 25	24. 10	8. 27	·1343	10. 26	·03265			
9. 30	22. 25	8. 31	·1333	10. 35	·03265			
9. 42	28. 0	8. 37	·1338	11. 11	·03217			
9. 57	20. 50	8. 41	·1337	11. 26	·03203			
10. 12	17. 15	8. 49	·1352	11. 36	·03211			
10. 38	26. 55	8. 52	·1336	11. 38	·03196			
10. 46	26. 20	8. 56	·1375	11. 42	·03203			
10. 49	28. 20	9. 11	·1331	12. 12	·03186			
11. 12	28. 5	9. 26	·1309	15. 41	·03157			
11. 26	30. 20	9. 34	·1313	15. 45	·03172			
11. 34	32. 55	9. 54	·1302	15. 55	·03163			
11. 38	30. 10	10. 6	·1305		* * *			
11. 44	32. 35	10. 12	·1318	18. 11	·03143			
12. 5	34. 0	10. 21	·1325	18. 53	·03156			
12. 8	33. 40	10. 26	·1323	22. 59	·03104			
12. 57	32. 30	10. 41	·1328	23. 4	·03118			
13. 19	33. 25	10. 52	·1340	23. 13	·03097			
13. 32	32. 40	10. 56	·1336	23. 22	·03107			
13. 53	33. 25	11. 12	·1334		* * *			
14. 6	32. 55	11. 25	·1340	23. 46	·03084			
14. 16	33. 15	11. 27	·1336	23. 59	·03108			
14. 23	32. 25	11. 40	·1345					
14. 55	32. 30	11. 42	·1335					
15. 11	33. 50	11. 46	·1342					
15. 16	31. 15	11. 56	·1337					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 25		Feb. 25						
h m	° ′ ″	h m		h m		h m	°	°
15. 21	20. 33. 15	12. 12	·1340					
15. 29	32. 10	12. 19	·1337					
15. 32	33. 25	13. 20	·1341					
15. 41	30. 20	13. 35	·1338					
15. 44	33. 40	14. 7	·1341					
15. 50	30. 40	14. 27	·1338					
15. 54	33. 15	15. 39	·1347					
16. 0	31. 50	15. 43	·1342					
16. 17	32. 25	15. 50	·1352					
16. 22	31. 20	15. 56	·1344					
16. 26	33. 45		***					
16. 30	31. 40	17. 22	·1351					
16. 36	32. 55	18. 6	·1346					
16. 46	30. 35	18. 27	·1338					
17. 2	30. 55	19. 4	·1344					
17. 4	29. 40	19. 14	·1342					
17. 16	33. 15	19. 41	·1348					
17. 19	30. 10	19. 56	·1345					
17. 26	33. 30	20. 20	·1346					
17. 32	28. 35	20. 42	·1353					
17. 41	32. 40	22. 4	·1353					
17. 47	29. 40	22. 10	·1361					
18. 10	31. 40	22. 20	·1363					
18. 20	31. 20	22. 28	·1362					
18. 33	33. 20	22. 35	·1355					
18. 45	32. 40	22. 47	·1353					
19. 2	33. 30	22. 56	·1368					
19. 13	32. 20	23. 5	·1350					
19. 29	32. 30	23. 11	·1354					
19. 43	34. 15	23. 20	·1348					
19. 59	32. 40	23. 24	·1356					
20. 26	32. 15	23. 28	·1342					
20. 32	33. 10	23. 33	·1355					
20. 38	32. 5	23. 43	·1331					
20. 44	33. 5	23. 56	·1343					
21. 48	34. 10	23. 59	·1336					
22. 0	34. 5							
22. 55	37. 10							
22. 58	39. 5							
23. 3	37. 15							
23. 13	39. 30							
	***							
23. 40	40. 15							
23. 46	38. 40							
23. 59	41. 45							
Feb. 26		Feb. 26		Feb. 26		Feb. 26		
0. 0	20. 41. 45	0. 0	·1336	0. 0	·03108	1. 0	58 ·0	58 ·1
0. 5	44. 45	0. 27	·1350	0. 19	·03085	3. 0	57 ·6	57 ·9
0. 12	40. 10	0. 36	·1335	0. 26	·03114	9. 0	57 ·9	57 ·6
0. 20	46. 30	0. 44	·1340	0. 29	·03104	21. 0	59 ·8	61 ·0
0. 40	40. 50	0. 56	·1357	0. 42	·03113			
1. 4	46. 50	1. 14	·1313	0. 57	·03143			
1. 13	40. 0	1. 24	·1342	1. 7	·03126			
1. 17	41. 15	1. 27	·1354	1. 18	·03126			
1. 22	39. 5	1. 42	·1346	1. 21	·03137			
1. 27	40. 10	1. 48	·1359	1. 50	·03195			
1. 32	37. 20	1. 53	·1353	1. 54	·03217			
					***			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 26		Feb. 26		Feb. 26				
h m	° ′ ″	h m		h m		h m	°	°
1. 39	20. 34. 40	1. 57	·1360	2. 22	·03224			
1. 43	31. 15	2. 0	·1352	2. 27	·03207			
1. 50	36. 45	2. 7	·1372	3. 11	·03187			
1. 57	37. 5	2. 11	·1349	4. 56	·03206			
2. 2	36. 35	2. 13	·1363		***			
2. 12	39. 25	2. 34	·1342	5. 24	·03218			
2. 17	43. 35	2. 56	·1355	5. 41	·03206			
2. 43	39. 20	3. 22	·1346	5. 50	·03218			
3. 7:	41. 20	3. 43	·1357	6. 9	·03217			
3. 25	39. 10	3. 57	·1354	6. 27	·03192			
3. 43	40. 10	4. 5	·1335	6. 46	·03197			
3. 53	39. 5	4. 25	·1355	6. 57	·03193			
4. 3	41. 35	4. 43	·1344	8. 41	·03191			
4. 17	34. 35	5. 4	·1360	8. 49	·03180			
4. 39	36. 30	5. 43	·1354	9. 36	·03198			
4. 57	29. 10	5. 57	·1367	9. 42	·03179			
5. 8	24. 45	6. 12	·1364	9. 53	·03196			
5. 16	26. 20	6. 19	·1348	10. 10	·03186			
5. 29	25. 15	6. 39	·1364	16. 55	·03277			
5. 52	27. 50	6. 52	·1357	18. 24	·03245			
5. 58	30. 25	7. 8	·1364	18. 57	·03257			
6. 9	29. 55	7. 12	·1359	21. 24	·03284			
6. 15	32. 0	7. 34	·1365	23. 4	·03268			
6. 25	30. 40	7. 53	·1362	23. 59	·03277			
6. 43	34. 35	8. 6	·1364					
6. 46	33. 55	8. 23	·1362					
7. 5	35. 30	8. 41	·1367					
7. 23	34. 25	8. 47	·1355					
8. 29	34. 25	8. 54	·1358					
8. 51	30. 45	9. 11	·1353					
9. 10	29. 55	9. 32	·1368					
9. 20	30. 15	9. 41	·1342					
9. 26	31. 20	9. 56	·1349					
9. 38	30. 30	10. 11	·1354					
9. 46	31. 55	16. 0	·1349					
10. 3	29. 25	17. 11	·1339					
10. 56	31. 55	18. 12	·1353					
11. 54	32. 15	18. 59	·1346					
15. 11	31. 40		***					
15. 49	31. 5	21. 20	·1339					
16. 38	31. 10	22. 22	·1345					
16. 54	34. 20	23. 2	·1344					
17. 10	34. 50	23. 11	·1335					
17. 19	34. 30	23. 19	·1340					
17. 36	36. 35	23. 43	·1328					
18. 4	33. 45	23. 59	·1329					
18. 11	31. 50							
18. 29	30. 30							
18. 50	30. 30							
18. 58	31. 40							
19. 8	31. 40							
19. 12	30. 40							
19. 23	30. 40							
19. 33	31. 50							
19. 47	31. 20							
20. 26	32. 0							
20. 33	30. 55							
20. 45	32. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 26								
h m	° ′ ″	h m		h m		h m	°	°
20.53	20. 30. 55							
20.58	32. 10							
21.24	31. 20							
21.33	31. 55							
21.56	32. 30							
22.27	35. 0							
22.42	35. 0							
22.56	35. 40							
23. 5	34. 25							
23.17	36. 10							
23.59	38. 5							
Feb. 27		Feb. 27		Feb. 27		Feb. 27		
0. 0	20. 38. 5	0. 0	·1329	0. 0	·03277	1. 0	59·2	59·9
0.23	39. 25	1. 2	·1346	1.11	·03294	3. 0	58·5	59·0
0.55	37. 10	1.59	·1355	2.24	·03278	9. 0	57·8	57·5
1.13	37. 50	2.43	·1347	3.24	·03296	21. 0	56·7	56·6
	***	3.11	·1356	6.40	·03242	22. 0	56·7	56·5
1.43	35. 40	3.24	·1354	6.52	·03247	23. 0	56·8	57·5
1.52	36. 50	3.41	·1357	8.14	·03230			
2. 9	36. 55	4.35	·1351	11.12	·03216			
2.28	38. 30	4.55	·1358	11.15	·03223			
2.33	37. 30	5.11	·1356	11.31	·03218			
2.41	37. 50	5.34	·1359	12.11	·03196			
2.44	35. 30	6.11	·1359		***			
2.56	34. 15	6.29	·1352	12.36	·03157			
3. 8	33. 55	6.53	·1361	12.42	·03157			
3.12	34. 40	7.12	·1363	12.54	·03143			
3.26	33. 25	7.55	·1362	13. 7	·03147			
3.42	33. 5	8.11	·1357	13.12	·03138			
3.54	33. 55	8.22	·1361	13.54	·03196			
4.26	33. 15	9.12	·1356	15.40	·03194			
4.38	32. 10	9.22	·1362	20.25	·03126			
4.56	33. 20	9.43	·1361	20.27	·03145			
5.27	32. 10	10.10	·1356	22.18	·03113			
5.48	33. 0	10.52	·1362	23.59	·03138			
6.14:	32. 50	11.19	·1360					
6.36	28. 30	11.27	·1373					
6.44	30. 0	11.49	·1386					
6.58:	27. 40	12.11	·1379					
7.26	29. 25	12.21	·1389					
7.40	30. 40	12.31	·1394					
7.53	30. 15	13.11	·1373					
7.58	30. 15	13.16	·1377					
8.13	29. 35	13.27	·1357					
8.19	30. 5	13.45	·1341					
8.26	29. 55	13.57	·1349					
8.44	31. 5	14. 9	·1346					
9.32	30. 40	14.16	·1353					
10.37	31. 40	14.24	·1350					
10.49	29. 5	14.40	·1355					
11.10	29. 10	14.56	·1350					
11.13	30. 10	15.14	·1356					
11.17	29. 40	15.37	·1354					
11.40	36. 25	17.44	·1360					
11.58	37. 10	18.20	·1369					
12.23	34. 55	19. 9	·1363					
12.37	29. 15	19.24	·1367					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Feb. 27		Feb. 27						
h m	° ′ ″	h m		h m		h m	°	°
12.41	20. 29. 0	19.45	·1362					
13. 2	17. 0	20.14	·1368					
13.15	16. 20	20.40	·1358					
13.17	13. 25	20.44	·1360					
13.19	17. 20	21. 6	·1357					
13.38	27. 5	21.41	·1363					
13.53	32. 20	22.22	·1362					
14. 7	31. 0	22.54	·1346					
14.11	31. 30	23.41	·1350					
14.19	30. 20	23.45	·1347					
14.26	30. 40	23.59	·1350					
14.51	28. 40							
15. 0	29. 55							
15.13	29. 50							
15.21	28. 35							
15.51	30. 10							
16.17	29. 20							
16.26	29. 40							
16.36	29. 15							
17. 1	29. 40							
19.13	29. 50							
19.20	30. 40							
20. 4	28. 50							
20.17	30. 10							
20.23	32. 50							
20.38	30. 15							
20.43	31. 10							
21. 3	30. 30							
21.53	32. 35							
21.59	31. 50							
22.25	33. 40							
22.36	33. 5							
23. 6	36. 15							
23.26	36. 30							
23.53	35. 50							
23.59	35. 55							
Feb. 28		Feb. 28		Feb. 28		Feb. 28		
0. 0	20. 35. 55	0. 0	·1350	0. 0	·03138	0. 0	56·8	57·0
0. 5	36. 30	0.14	·1353	1.16	·03158	1. 0	57·3	58·0
0.16	35. 40	0.29	·1360	1.41	·03180	2. 0	57·3	58·0
0.24	36. 55	0.36	·1356	2.32	·03183	3. 0	57·4	57·5
0.30	35. 35	0.42	·1362	3.12	·03200	9. 0	58·3	58·2
0.56	37. 15	1.12	·1348	3.39	·03188	21. 0	57·6	57·7
1.17	34. 40	1.41	·1357	4.26	·03197	22. 0	57·8	57·6
1.28	34. 30	1.44	·1351	4.46	·03192	23. 0	57·8	57·9
1.36	35. 20	1.56	·1355	10.55	·03217			
1.41	34. 0	2.39	·1351	17.10	·03210			
1.53	34. 40	2.43	·1358	21.18	·03178			
2.32	33. 25	2.56	·1355	23. 4	·03156			
2.40	34. 30	3.12	·1366	23.59	·03164			
2.42	33. 40	3.43	·1351					
2.57	33. 40	4.12	·1357					
3. 6	34. 45	4.37	·1352					
	***	4.43	·1346					
3.28	33. 10	4.56	·1354					
3.49	32. 40	5.41	·1358					
4.11	33. 15	6.26	·1356					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Feb. 28		Feb. 28						
h m	° ′ ″	h m		h m		h m	°	°
4. 49	20. 32. 30	7. 19	·1360					
5. 21	32. 15	9. 20	·1360					
5. 36:	32. 50	9. 35	·1355					
5. 54	32. 5	10. 0	·1352					
6. 29	32. 40	10. 13	·1347					
6. 41	32. 10	10. 54	·1363					
9. 19	31. 45	11. 40	·1354					
9. 34	31. 0	11. 57	·1355					
10. 4	31. 0	13. 41	·1354					
10. 19	26. 40	13. 57	·1358					
10. 28	27. 30	16. 38	·1357					
10. 46	24. 10	18. 21	·1367					
10. 55	25. 5	19. 24	·1344					
11. 1	24. 50	19. 44	·1348					
11. 32	31. 25	20. 0	·1355					
11. 49	32. 5	21. 22	·1352					
12. 51	32. 40	22. 11	·1346					
13. 25	31. 40	22. 42	·1347					
13. 34	33. 20	22. 54	·1356					
13. 41	32. 35	23. 12	·1347					
13. 49	33. 0	23. 59	·1355					
14. 11	31. 55							
14. 39	32. 10							
14. 57	31. 40							
16. 58	31. 10							
17. 4	32. 5							
17. 13	31. 10							
17. 33	31. 10							
17. 51	30. 20							
18. 2	30. 40							
18. 38	30. 5							
19. 24	36. 40							
19. 39	36. 10							
19. 41	34. 40							
19. 53	34. 50							
20. 23	31. 50							
20. 41	31. 15							
21. 32	32. 40							
21. 41	32. 15							
21. 56	33. 10							
22. 5	32. 35							
22. 13	33. 40							
22. 34:	34. 25							
22. 46	37. 5							
23. 25	34. 55							
23. 59	37. 20							
Mar. 1		Mar. 1		Mar. 1		Mar. 1		
0. 0	20. 37. 20	0. 0	·1355	0. 0	·03164	0. 0	58·0	58·0
0. 23	36. 30	0. 22	·1350	3. 11	·03248	1. 0	58·4	58·6
0. 26	37. 40	1. 14	·1356	4. 56	·03260	3. 0	58·3	58·5
0. 29	37. 25	1. 23	·1347	5. 11	·03313	9. 0	56·8	56·9
0. 39	38. 0	1. 42	·1344	5. 14	·03290	21. 0	59·3	60·0
0. 54	37. 30	1. 55	·1348	5. 25	·03303			
0. 58	40. 20	2. 11	·1346	6. 54:	·03217			
1. 5	38. 5	2. 39	·1329	8. 40	·03184			
1. 14	40. 20	2. 58	·1335	8. 56	·03196			
1. 27	38. 20	3. 19	·1347	10. 4	·03160			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 1		Mar. 1		Mar. 1				
h m	° ′ ″	h m		h m		h m	°	°
1. 34	20. 38. 40	3. 41	·1342	10. 23	·03175			
1. 44	37. 40	3. 52	·1345	10. 53	·03158			
1. 56	40. 10	4. 0	·1340	11. 12	·03168			
2. 7	40. 25	4. 15	·1348	11. 28	·03143			
2. 12	39. 10	4. 24	·1342	12. 34	·03177			
2. 15	40. 20	4. 27	·1344	15. 12	·03222			
2. 22	39. 20	4. 43	·1333	17. 18	·03249			
2. 50	40. 0	4. 59	·1354	18. 11	·03246			
2. 56	39. 40	5. 10	·1334	21. 30	·03260			
3. 0	37. 35	5. 12	·1353	22. 56	·03236			
3. 19	39. 10	5. 21	·1361	23. 59	·03240			
3. 41	37. 50	5. 45	·1341					
3. 51	37. 40	6. 11	·1345					
3. 59	36. 30	6. 21	·1342					
4. 10	36. 25	6. 44	·1352					
4. 16	37. 20	7. 0	·1349					
4. 23	36. 55	7. 21	·1353					
4. 32	37. 40	7. 39	·1349					
4. 41	33. 30	8. 13	·1346					
4. 43	33. 30	8. 36	·1342					
4. 56	29. 10	8. 57	·1365					
4. 58	31. 10	9. 19	·1356					
5. 13	18. 15	9. 25	·1358					
5. 23	23. 0	9. 39	·1354					
5. 41	28. 0	9. 44	·1357					
5. 44	27. 30	10. 0	·1344					
6. 8	30. 0	10. 12	·1346					
6. 14	33. 0	10. 27	·1353					
6. 45	32. 40	10. 45	·1347					
6. 56	33. 20	11. 6	·1338					
7. 40	32. 0	11. 12	·1353					
7. 56	32. 50	11. 28	·1357					
8. 10	32. 0	11. 41	·1367					
8. 26	26. 15	12. 8	·1365					
8. 33	22. 40	12. 24	·1353					
8. 39	21. 50	12. 43	·1359					
9. 3	26. 20	13. 27	·1349					
9. 11	25. 10	13. 43	·1353					
9. 25	28. 15	14. 12	·1349					
9. 30	27. 30	14. 54	·1347					
9. 44	30. 5	15. 12	·1351					
9. 57	27. 55	16. 27	·1350					
10. 10	28. 0	17. 11	·1344					
10. 14	29. 20	17. 22	·1346					
10. 24	29. 35	17. 53	·1353					
10. 28	31. 10	18. 20	·1356					
10. 36	31. 10	18. 57	·1350					
10. 41	30. 40	19. 32	·1348					
10. 46	29. 15	20. 11	·1352					
11. 9	33. 55	20. 43	·1331					
11. 27	23. 55	20. 59	·1329					
11. 38	25. 0	21. 34	·1342					
11. 44	24. 5	22. 11	·1348					
12. 2	25. 55	22. 36	·1347					
12. 5	24. 15	22. 56	·1343					
13. 12	31. 30	23. 59	·1349					
13. 42	32. 10							
13. 56	31. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 1								
h m	° ′ ″	h m		h m		h m	°	°
14. 12	20. 32. 55							
14. 30	32. 25							
14. 39	32. 55							
14. 51	32. 55							
15. 9	34. 0							
15. 24	32. 40							
16. 5	33. 30							
16. 24	32. 10							
16. 43	32. 20							
16. 55	34. 20							
17. 24	37. 5							
18. 12	33. 0							
18. 46	34. 15							
19. 22	34. 40							
19. 33	34. 0							
20. 12	35. 10							
20. 21	34. 20							
20. 25	35. 30							
20. 39	35. 35							
20. 57	33. 55							
21. 9	34. 40							
21. 22	34. 5							
21. 28	35. 25							
21. 51	34. 45							
22. 9	36. 30							
22. 41	37. 50							
23. 11	36. 55							
23. 41	39. 40							
23. 51	39. 20							
23. 59	39. 35							
Mar. 2		Mar. 2		Mar. 2		Mar. 2		
0. 0	20. 39. 35	0. 0	·1349	0. 0	·03240	1. 0	60 ·6	60 ·4
0. 34	38. 55	0. 24	·1350	0. 27	·03253	3. 0	60 ·5	60 ·9
0. 43	39. 0	1. 9	·1354	2. 10	·03309	9. 0	58 ·3	59 ·0
1. 39	38. 20	2. 13	·1356	2. 56	·03320	21. 0	59 ·4	60 ·0
1. 55	38. 55	2. 56	·1354	3. 13	·03338			
2. 9	38. 20	3. 12	·1363	3. 58	·03357			
2. 12	39. 5	3. 23	·1355	4. 11	·03346			
2. 23	38. 0	3. 27	·1359	5. 26	·03334			
2. 27	38. 40	3. 41	·1351	6. 26	·03298			
2. 36	38. 0	3. 54	·1351	9. 34	·03244			
2. 48	37. 55	4. 9	·1339	10. 40	·03260			
3. 3	36. 10	4. 25	·1347	11. 9	·03248			
3. 11	37. 50	4. 41	·1345	12. 12	·03277			
3. 20	36. 55	5. 12	·1355	14. 29	·03288			
3. 26	35. 25	5. 39	·1353	17. 23	·03296			
3. 33	36. 40	7. 27	·1362	22. 40	·03286			
3. 41	33. 45	7. 55	·1360	23. 59	·03229			
3. 45	34. 0	8. 14	·1363					
3. 53	32. 40	8. 56	·1355					
3. 59	34. 0	9. 14	·1358					
4. 17	30. 30	10. 13	·1351					
4. 26	30. 30	10. 52	·1369					
4. 39	32. 25	11. 12	·1354					
4. 54	31. 0	11. 19	·1357					
5. 9	31. 0	11. 55	·1347					
6. 13	34. 45	12. 20	·1352					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 2		Mar. 2						
h m	° ′ ″	h m		h m		h m	°	°
6. 46:	20. 31. 50	12. 29	·1350					
7. 3	33. 10	14. 57	·1354					
7. 16	33. 25	17. 14	·1356					
8. 28	31. 50	17. 41	·1354					
8. 44	32. 30	17. 55	·1356					
9. 21	32. 25	18. 26	·1355					
9. 43	31. 15	18. 51	·1351					
10. 8	31. 55	19. 12	·1355					
10. 27	31. 55	20. 21	·1355					
10. 42	29. 40	20. 43	·1352					
11. 8	26. 55	23. 13	·1352					
11. 26	28. 15	23. 59	·1354					
11. 33	28. 15							
12. 24	32. 10							
12. 50	31. 55							
14. 13	32. 40							
15. 4	31. 55							
15. 24	32. 40							
16. 8	32. 50							
16. 23	31. 55							
16. 29	33. 0							
16. 41	33. 30							
17. 12	32. 50							
17. 32	34. 40							
18. 4	32. 40							
18. 16	32. 25							
18. 33	33. 10							
19. 30	32. 35							
20. 26	32. 45							
20. 33	32. 25							
20. 43	32. 30							
20. 47	33. 25							
20. 53	32. 30							
21. 26	32. 40							
22. 11	33. 45							
22. 23	33. 30							
23. 11	34. 45							
23. 59	34. 30							
Mar. 3		Mar. 3		Mar. 3		Mar. 3		
0. 0	20. 34. 30	0. 0	·1354	0. 0	·03229	1. 0	57 ·9	57 ·5
0. 17	36. 30	0. 13	·1359	0. 44	·03217	3. 0	57 ·8	57 ·2
0. 40:	34. 30	0. 41	·1354	5. 41	·03229	9. 0	58 ·2	58 ·2
1. 6	34. 30	1. 14	·1360	7. 11	·03246	22. 0	59 ·8	60 ·0
1. 14	35. 35	1. 28	·1356	7. 24	·03224			
1. 23	34. 55	3. 7	·1362	7. 38	·03246			
1. 28	33. 40	3. 18	·1359	7. 54	·03237			
1. 36	34. 50	4. 12	·1359	8. 20	·03240			
1. 42	33. 45	4. 34	·1358	9. 12	·03262			
2. 18	33. 40	5. 26	·1360	10. 0	·03236			
2. 29	32. 30	5. 45	·1355	10. 19	·03244			
2. 36	33. 40	6. 12	·1360	10. 42:	·03240			
2. 45	33. 50	6. 26	·1358	11. 0	·03254			
3. 11	33. 0	7. 6	·1365	11. 25	·03252			
3. 25	33. 10	7. 12	·1357	14. 42	·03298			
3. 59	32. 40	7. 26	·1379	18. 40	·03318			
4. 21	32. 25	7. 45	·1361	21. 56	·03312			
5. 3	33. 0	8. 21	·1339	23. 59	·03296			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 3		Mar. 3						
h m	° ′ ″	h m		h m		h m	°	°
5. 14	20. 32. 40	8. 29	·1342					
5. 26	32. 50	8. 53	·1336					
5. 38	31. 50	9. 12	·1341					
5. 56;	31. 25	9. 20	·1340					
6. 13	33. 15	9. 39	·1356					
6. 23	32. 55	9. 56	·1351					
6. 30	31. 0	10. 12	·1356					
6. 41	30. 45	10. 51	·1344					
7. 3	33. 25	11. 10	·1350					
7. 16	21. 25	11. 57	·1353					
7. 26	27. 10	12. 20	·1351					
7. 33	27. 50	12. 38	·1354					
7. 39	27. 25	19. 59	·1355					
7. 51	29. 15	20. 44	·1351					
8. 11	25. 50	23. 7	·1352					
8. 21	25. 20	23. 59	·1353					
8. 26	25. 50							
8. 39	25. 20							
9. 13	31. 40							
9. 22	27. 0							
9. 31	27. 20							
9. 57	22. 40							
10. 10	25. 50							
10. 16	26. 20							
10. 37	26. 0							
11. 4	32. 20							
11. 42	32. 30							
11. 56	31. 50							
13. 4	32. 25							
13. 47	32. 10							
16. 39	32. 20							
16. 51	32. 55							
16. 56	32. 15							
18. 3	31. 25							
19. 10	32. 10							
20. 58	32. 0							
21. 58	33. 0							
22. 44	34. 30							
22. 56	35. 20							
23. 43	34. 40							
23. 59	35. 10							
Mar. 4		Mar. 4		Mar. 4		Mar. 4		
0. 0	20. 35. 10	0. 0	·1353	0. 0	·03296	1. 0	59 ·0	59 ·0
0. 54	35. 30	1. 11	·1359	1. 23	·03278	8. 30	58 ·0	58 ·0
1. 25	37. 10	1. 25	·1357	1. 53	·03263	21. 0	60 ·2	61 ·2
1. 57	34. 25	1. 55	·1352	4. 25	·03249			
2. 10	35. 0	2. 12	·1356	9. 40	·03217			
2. 24	34. 20	2. 55	·1359	11. 49	·03263			
3. 3	34. 15	3. 6	·1363	12. 38	·03263			
3. 26	32. 50	5. 17	·1361	13. 29	·03284			
3. 31	33. 5	7. 23	·1366	15. 55	·03307			
4. 15	32. 20	7. 41	·1364	19. 15	·03327			
5. 11	32. 20	7. 56	·1366	21. 36	·03324			
6. 13	33. 5	8. 21	·1363	23. 59	·03263			
7. 26	32. 30	8. 55	·1366					
8. 44	31. 50	9. 53	·1361					
9. 4	32. 5	10. 19	·1362					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 4		Mar. 4						
h m	° ′ ″	h m		h m		h m	°	°
9. 16	20. 31. 15	11. 41	·1355					
9. 41	31. 20	12. 11	·1361					
9. 53	31. 40	12. 21	·1366					
10. 41	30. 20	12. 55	·1356					
11. 11	30. 55	13. 42	·1357					
11. 23	32. 5	14. 11	·1355					
11. 32	32. 5	15. 22	·1357					
12. 9	30. 40	18. 42	·1358					
12. 14	30. 50	20. 19	·1355					
12. 37	30. 15	21. 11	·1350					
12. 47	30. 50	21. 46	·1350					
12. 56	30. 50	22. 37	·1346					
13. 21	32. 10	23. 59	·1351					
13. 33	32. 20							
13. 55	31. 40							
14. 26	31. 55							
15. 26	31. 45							
15. 55	30. 40							
16. 16	31. 10							
16. 27	30. 40							
16. 53	30. 40							
17. 26	31. 50							
17. 41	30. 55							
17. 56	31. 10							
18. 4	30. 20							
18. 26	30. 50							
19. 46	29. 55							
20. 56	30. 0							
21. 47	31. 20							
22. 17	31. 40							
23. 59	35. 5							
Mar. 5		Mar. 5		Mar. 5		Mar. 5		
0. 0	20. 35. 5	0. 0	·1351	0. 0	·03263	1. 0	58 ·8	59 ·9
0. 28	35. 55	0. 41	·1361	0. 45	·03244	3. 0	58 ·7	58 ·2
1. 37	35. 45	3. 23	·1367	3. 57	·03252	9. 0	57 ·3	58 ·0
2. 18	36. 15	4. 20	·1366	7. 24	·03222	21. 0	58 ·1	58 ·2
3. 0	35. 15	6. 12	·1371	7. 41	·03235			
3. 17	35. 25	6. 45	·1368	7. 59	·03222			
4. 24	34. 10	7. 14	·1362	9. 34	·03196			
5. 26	34. 0	7. 41	·1373	12. 21	·03195			
5. 40	33. 25	7. 55	·1374	12. 41	·03205			
6. 0	35. 0	8. 41	·1368	12. 56	·03201			
6. 14	35. 0	9. 14	·1372	13. 10	·03218			
6. 33	36. 5	9. 50	·1367	13. 22	·03183			
6. 54	34. 50	10. 29	·1371	13. 45	·03181			
7. 27	26. 0	10. 56	·1366	14. 13	·03137			
7. 35	26. 40	11. 27	·1376	14. 35	·03118			
7. 58	24. 10	11. 44	·1374	15. 8	·03163			
8. 26	30. 15	12. 12	·1377	15. 23	·03160			
8. 43	31. 50	12. 27	·1362	17. 40	·03202			
9. 16	30. 20	12. 41	·1369	20. 26	·03220			
9. 43	30. 40	12. 55	·1363	21. 26	·03201			
10. 23	32. 0	13. 10	·1374	23. 59	·03184			
10. 29	32. 55	13. 20	·1358					
10. 43	31. 20	13. 27	·1365					
11. 39	32. 50	13. 41	·1363					
11. 58	32. 0	13. 57	·1369					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 5		Mar. 5						
h m	° ′ ″	h m		h m		h m	°	°
12. 14	20. 30. 15	14. 23	·1362					
12. 34	30. 45	14. 52	·1344					
13. 16	43. 50	15. 15	·1365					
13. 32	37. 0	16. 5	·1361					
13. 39	36. 55	16. 26	·1367					
13. 56	42. 0	17. 26	·1357					
14. 21	37. 45	18. 9	·1367					
14. 30	37. 45	18. 43	·1361					
14. 56	32. 5	19. 0	·1363					
15. 3	32. 25	19. 26	·1360					
15. 33	25. 25	20. 23	·1348					
15. 58	26. 5	20. 43	·1354					
16. 11	24. 25	20. 56	·1351					
16. 23	24. 20	21. 27	·1350					
16. 26	25. 15	22. 10	·1342					
16. 33	25. 30	22. 25	·1348					
16. 40	25. 10	22. 49	·1344					
16. 56	27. 40	23. 23	·1345					
17. 11	28. 40	23. 59	·1357					
17. 23	28. 40							
17. 33	29. 45							
17. 43	27. 55							
17. 56	27. 55							
18. 10	27. 25							
18. 26	29. 20							
18. 45	28. 30							
19. 21	30. 0							
19. 32	29. 25							
20. 6	31. 30							
20. 23	31. 0							
20. 39	31. 30							
20. 44	32. 45							
20. 56	31. 50							
21. 5	32. 40							
21. 26	31. 30							
21. 39	32. 45							
21. 53	32. 10							
22. 8	32. 5							
22. 37	35. 30							
22. 53	34. 30							
22. 56	35. 40							
23. 6	34. 45							
23. 28	36. 30							
23. 36	37. 45							
23. 55	38. 30							
23. 59	40. 30							
Mar. 6		Mar. 6		Mar. 6		Mar. 6		
0. 0	20. 40. 30	0. 0	·1357	0. 0	·03184	1. 0	58 ·7	59 ·1
0. 7	40. 25	0. 27	·1353	0. 12	·03180	3. 0	58 ·8	58 ·8
0. 12	40. 55	0. 40	·1356	1. 54	·03229	9. 0	58 ·6	58 ·7
0. 18	39. 5	1. 17	·1351	2. 22	·03226	21. 0	58 ·6	59 ·0
0. 30	39. 45	1. 36	·1355	4. 23	·03280	22. 30	58 ·8	60 ·0
0. 40	38. 30	1. 43	·1351	5. 48	·03298	23. 0	58 ·8	58 ·8
0. 54	41. 50	1. 59	·1362	6. 10	·03282			
1. 19	40. 15	2. 25	·1358	8. 26	·03277			
1. 33	40. 40	3. 11	·1370	8. 38	·03298			
1. 49	38. 5	3. 18	·1367	8. 46	·03298			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 6		Mar. 6		Mar. 6				
h m	° ′ ″	h m		h m		h m	°	°
1. 56	20. 39. 0	3. 41	·1370	9. 12	·03273			
2. 10	37. 10	4. 5	·1355	9. 21	·03268			
2. 16	37. 45	4. 12	·1352	9. 27	·03240			
2. 41	38. 10	5. 6	·1354	10. 8	·03231			
3. 6:	40. 0	5. 25	·1348	10. 53	·03246			
3. 20	40. 0	5. 38	·1345	12. 19	·03213			
3. 39	42. 30	5. 52	·1362	12. 41	·03213			
3. 44	41. 30	6. 0	·1359	12. 58	·03180			
3. 50	41. 55	6. 54	·1371	13. 9	·03196			
3. 58	40. 20	7. 9	·1362	13. 20	·03184			
4. 9	34. 40	7. 19	·1357	13. [illegible]	·03188			
4. 27	37. 20	7. 42	·1364	13. 47	·03170			
4. 41	36. 55	7. 45	·1362	14. 3	·03119			
4. 50	38. 40	7. 55	·1364	14. 12	·03144			
4. 57	39. 20	8. 22	·1344	14. 25	·03128			
5. 4	38. 40	8. 59	·1378	14. 56	·03172			
5. 27	39. 20	9. 13	·1372	15. 57	·03220			
5. 41	35. 20	9. 37	·1351	16. 35	·03238			
5. 54	37. 55	9. 58	·1342	17. 9	·03243			
6. 11	35. 5	10. 41	·1337	18. 52	·03248			
6. 25	35. 30	11. 12	·1350	20. 19	·03236			
6. 56	34. 10	11. 27	·1362	21. 53	·03223			
7. 12	34. 45	11. 41	·1359	22. 46	·03216			
7. 26	34. 0	12. 6	·1342	22. 57	·03227			
7. 45	34. 30	12. 19	·1338	23. 29	·03205			
7. 59	33. 55	12. 41	·1342	23. 59	·03213			
8. 27	18. 0	13. 9	·1338					
8. 44	14. 20	13. 14	·1345					
9. 3	17. 25	13. 23	·1341					
9. 9	17. 30	13. 43	·1350					
9. 20	21. 20	14. 12	·1316					
9. 28	18. 50	14. 29	·1338					
9. 34	20. 10	14. 48	·1356					
9. 47	18. 30	15. 11	·1346					
10. 33	26. 20	15. 35	·1342					
10. 40	26. 20	15. 41	·1344					
10. 59	29. 0	16. 9	·1340					
11. 11	28. 30	16. 35	·1344					
11. 24	29. 20	16. 43	·1350					
11. 27	29. 0	17. 0	·1349					
11. 53	32. 10	17. 26	·1354					
12. 20	29. 10	18. 45	·1349					
12. 31	28. 50	18. 56	·1353					
12. 40	30. 0	19. 21	·1348					
12. 53	28. 20	19. 37	·1357					
13. 0	26. 55	20. 12	·1343					
13. 8	28. 10	20. 53	·1334					
13. 15	22. 0	21. 12	·1337					
13. 28	20. 25	21. 26	·1345					
13. 35	21. 25	22. 0	·1344					
13. 43	27. 50	22. 41	·1354					
13. 54	31. 10	22. 59	·1354					
14. 3	22. 55	23. 15	·1365					
14. 10	25. 50	23. 44	·1351					
14. 30	16. 15	23. 49	·1357					
14. 55	24. 30	23. 59	·1354					
15. 21	26. 0							
15. 45	30. 20							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 6								
h m	° ′ ″	h m		h m		h m	°	°
15. 56	20. 32. 55							
15. 59	32. 40							
16. 9	33. 55							
16. 29	31. 20							
16. 33	33. 20							
16. 56	30. 20							
17. 6	30. 40							
17. 13	29. 50							
17. 54	32. 15							
	***							
18. 40	30. 30							
	***							
19. 8	30. 30							
19. 10	29. 15							
19. 20	29. 25							
19. 29	32. 50							
19. 38	31. 40							
19. 44	32. 45							
19. 58	31. 55							
20. 4	33. 25							
20. 33	34. 10							
20. 39	34. 55							
20. 43	34. 0							
21. 11	32. 40							
21. 25	34. 50							
21. 33	34. 10							
21. 53	34. 40							
21. 56	33. 15							
22. 4	35. 20							
22. 10	33. 40							
22. 14	34. 40							
22. 25	34. 40							
22. 28	33. 40							
22. 42	35. 0							
22. 47	34. 30							
23. 9	39. 25							
23. 14	40. 20							
23. 33	38. 25							
	***							
23. 59	41. 25							
Mar. 7		Mar. 7		Mar. 7		Mar. 7		
0. 0	20. 41. 25	0. 0	·1354	0. 0	·03213	0. 0	58 ·7	58 ·1
0. 24	43. 25	0. 23	·1340	0. 44	·03205	1. 0	58 ·3	58 ·0
0. 38	43. 25	0. 33	·1336	1. 56	·03237	2. 0	58 ·2	57 ·8
	***	0. 41	·1339	2. 21	·03252	3. 0	58 ·3	59 ·0
0. 56	38. 55	0. 45	·1333	2. 30	·03273	9. 0	57 ·8	58 ·0
1. 22	40. 30	1. 9	·1334	2. 41	·03262	21. 0	60 ·1	62 ·0
1. 43	44. 20	1. 16	·1340	3. 7	·03287	22. 0	59 ·8	60 ·5
1. 53	42. 40	1. 50	·1336	3. 23	·03420	23. 0	59 ·6	59 ·7
1. 59	43. 30	2. 3	·1344	3. 28	·03398			
2. 23	42. 25	2. 22	·1350	3. 35	·03398			
2. 26	45. 5	2. 29	·1366	4. 11	·03337			
2. 32	45. 30	2. 53	·1350	4. 38	·03332			
2. 38	43. 30	2. 56	·1354	5. 25	·03302			
2. 43	43. 10	3. 11	·1339	5. 40	·03317			
2. 56	45. 30	3. 20	·1372		***			
3. 9	38. 50	3. 25	·1363	5. 57	·03317			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 7		Mar. 7		Mar. 7				
h m	° ′ ″	h m		h m		h m	°	°
3. 12	20. 42. 40	3. 26	·1366	6. 11	·03279			
3. 26	30. 30	3. 38	·1350	6. 19	·03303			
3. 40	29. 20	4. 8	·1364	6. 41	·03252			
4. 0	40. 50	4. 13	·1343	6. 44	·03256			
4. 13	36. 55	4. 41	·1359	6. 51	·03242			
4. 38	39. 25	4. 55	·1353	7. 14	·03245			
4. 47	38. 55	5. 11	·1357	7. 29	·03260			
	***	5. 23	·1356	7. 42	·03244			
5. 26	39. 40	5. 41	·1346	8. 35	·03247			
5. 38	32. 30	5. 55	·1350	9. 26	·03196			
5. 49	19. 20	6. 6	·1376	9. 56	·03148			
6. 3	26. 50	6. 12	·1344	10. 55	·03132			
6. 15	9. 55	6. 25	·1405	11. 34	·03180			
6. 31	22. 0	6. 41	·1377	13. 12	·03234			
6. 41	18. 0	6. 45	·1385	14. 15	·03202			
6. 45	23. 10	6. 56	·1362	14. 28	·03212			
6. 51	21. 55	7. 18	·1340	15. 14	·03187			
7. 1	24. 20	7. 41	·1352	16. 23	·03229			
7. 8	24. 30	7. 52	·1340	17. 55	·03257			
7. 13	25. 20	8. 9	·1346	20. 4	·03264			
7. 18	24. 20	8. 20	·1333	21. 43	·03260			
7. 21	24. 50	8. 34	·1337	21. 57	·03256			
7. 27	23. 50	8. 53	·1340	23. 10	·03242			
7. 32	25. 40	9. 12	·1361	23. 59	·03237			
7. 41	27. 55	9. 18	·1358					
7. 47	27. 20	9. 36	·1373					
8. 9	31. 40	9. 42	·1356					
8. 25	29. 45	10. 4	·1348					
8. 28	30. 20	10. 22	·1375					
8. 44	29. 40	10. 42	·1356					
9. 1	18. 40	11. 23	·1332					
9. 23	27. 40	11. 45	·1349					
9. 26	28. 0	12. 0	·1346					
9. 32	31. 20	12. 12	·1348					
10. 0	17. 10	12. 41	·1344					
10. 26	28. 10	13. 26	·1350					
10. 43	28. 5	13. 41	·1345					
10. 57	24. 40	13. 57	·1341					
11. 0	25. 5	14. 12	·1332					
11. 14	24. 45	14. 39	·1329					
11. 37	31. 10	15. 10	·1357					
11. 46	31. 0	15. 44	·1358					
12. 0	31. 50	16. 12	·1352					
12. 20	30. 30	16. 39	·1357					
12. 41	31. 10	16. 57	·1358					
12. 56	29. 55	17. 11	·1356					
13. 7	30. 30	17. 25	·1358					
13. 12	31. 55	17. 41	·1355					
13. 24	30. 15	18. 34	·1355					
13. 31	31. 10	19. 11	·1335					
13. 43	29. 55	20. 12	·1343					
14. 7	34. 15	20. 27	·1338					
14. 12	33. 0	21. 25	·1338					
14. 38	45. 30	22. 13	·1330					
14. 52	43. 25	22. 57	·1337					
15. 1	43. 30	23. 22	·1344					
15. 22	36. 30	23. 34	·1348					
15. 29	36. 25	23. 59	·1338					
15. 40	34. 15							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 7								
h m	° ′ ″	h m		h m		h m	°	°
16. 9	20. 32. 10							
16. 41	30. 55							
17. 7	31. 55							
17. 13	30. 55							
17. 27	30. 45							
17. 41	32. 30							
17. 46	31. 20							
18. 25	30. 0							
19. 23	32. 10							
19. 33	33. 40							
19. 51	32. 5							
20. 4	33. 10							
20. 13	31. 40							
20. 29	32. 20							
20. 40	34. 15							
20. 58	33. 30							
21. 7	34. 35							
21. 46	34. 0							
22. 8	35. 0							
22. 36	34. 10							
22. 42	34. 0							
22. 56	33. 5							
23. 7	34. 30							
23. 16	34. 10							
23. 30	36. 40							
23. 40	36. 10							
23. 51	37. 25							
23. 59	36. 25							
Mar. 8		Mar. 8		Mar. 8		Mar. 8		
0. 0	20. 36. 25	0. 0	·1338	0. 0	·03237	0. 0	59·7	59·7
0. 6	36. 45	0. 42	·1347	1. 11	·03240	1. 0	59·6	60·6
0. 11	35. 10	1. 6	·1342	1. 55	·03258	3. 0	59·5	59·8
0. 16	36. 0	1. 22	·1337	3. 25	·03260	9. 0	58·2	57·6
0. 23	35. 40	1. 55	·1350	4. 49	·03239	21. 0	57·9	57·8
0. 33	38. 0	2. 20	·1346	5. 12	·03240			
0. 53	39. 25	2. 41	·1352	6. 14	·03227			
1. 21	37. 0	3. 18	·1350	8. 43	·03218			
1. 29	37. 20	3. 44	·1358	9. 11	·03192			
1. 53	36. 30	4. 46	·1361	9. 19	·03198			
1. 59	35. 25	5. 2	·1367	9. 54	·03160			
2. 39	35. 55	5. 41	·1363	10. 21	·03172			
3. 0	35. 0	5. 54	·1367	10. 36	·03168			
3. 11	35. 40	6. 19	·1359	11. 24:	·03198			
3. 25	34. 55	6. 42	·1365	12. 13	·03177			
3. 32	34. 55	7. 11	·1359	12. 25	·03183			
3. 44	35. 30	7. 41	·1364	12. 55	·03173			
4. 9	34. 20	8. 25	·1356	13. 7	·03182			
4. 25	34. 45	8. 41	·1368	13. 29	·03163			
4. 41	34. 10	8. 44	·1385	14. 48	·03180			
5. 0	34. 45	9. 10	·1376	15. 40	·03184			
5. 39	34. 0	9. 19	·1386	18. 43	·03178			
6. 8	33. 35	9. 44	·1364	21. 23	·03162			
6. 24	30. 20	10. 9	·1348	23. 3	·03157			
6. 39	30. 30	10. 20	·1352	23. 59	·03176			
7. 24	32. 25	10. 41	·1343					
7. 32	32. 10	11. 11	·1348					
8. 4	33. 15	11. 15	·1346					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 8		Mar. 8						
h m	° ′ ″	h m		h m		h m	°	°
8. 13	20. 33. 0	11. 40	·1356					
8. 26	30. 50	11. 43	·1352					
8. 33	26. 50	11. 58	·1365					
8. 48	28. 5	12. 24	·1356					
9. 4	22. 0	12. 45	·1367					
9. 23	32. 55	13. 9	·1354					
9. 40	32. 45	13. 27	·1358					
10. 4	28. 0	13. 41	·1354					
10. 21	30. 40	13. 55	·1357					
10. 29	27. 0	14. 27	·1348					
10. 41	26. 0	14. 56	·1356					
11. 3	28. 15	15. 11	·1351					
11. 32	33. 5	16. 52	·1362					
11. 58	31. 40	17. 0	·1358					
12. 4	30. 0	17. 15	·1362					
12. 14	28. 40	17. 59	·1361					
12. 23	29. 55	18. 34	·1366					
12. 33	27. 5	19. 26	·1364					
12. 47	27. 40	20. 15	·1358					
13. 3	32. 40	21. 43	·1352					
13. 13	30. 20	22. 16	·1347					
13. 33	28. 20	22. 43	·1353					
14. 4	31. 15	23. 0	·1349					
14. 33	30. 25	23. 12	·1350					
14. 54	30. 35	23. 50	·1352					
15. 9	29. 20	23. 59	·1358					
15. 22	29. 30							
15. 40	31. 25							
15. 47	30. 55							
16. 40	31. 30							
16. 54	32. 40							
17. 13	31. 45							
17. 28	32. 0							
17. 53	31. 25							
18. 4	31. 40							
18. 22	30. 30							
19. 42	31. 30							
19. 50	32. 15							
20. 0	31. 30							
20. 24	32. 0							
20. 39	32. 40							
21. 4	32. 30							
21. 23	33. 25							
21. 38	32. 45							
21. 44	33. 50							
22. 14	33. 50							
22. 50	37. 55							
23. 9	38. 0							
23. 25	36. 45							
23. 51	37. 35							
23. 59	38. 30							
Mar. 9		Mar. 9		Mar. 9		Mar. 9		
0. 0	20. 38. 30	0. 0	·1358	0. 0	·03176	1. 0	58·7	59·5
0. 11	39. 5	0. 34	·1362	3. 6	·03217	3. 0	59·2	59·5
0. 30	38 10	0. 55	·1359	5. 13	·03222	9. 0	57·8	58·5
0. 43	38. 5	1. 13	·1364	6. 56	·03198	21. 0	60·4	61·0
0. 58	37. 0	2. 10	·1368	7. 48	·03200			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 9		Mar. 9		Mar. 9				
h m	° ′ ″	h m		h m		h m	°	°
1. 54	20. 36. 55	3. 6	·1361	7. 56	·03182			
2. 10	37. 45	3. 14	·1363	8. 22	·03196			
2. 33	36. 50	3. 45	·1359	8. 59	·03170			
2. 42	36. 55	3. 57	·1365	9. 41	·03171			
3. 43	33. 55	4. 26	·1362	10. 11	·03177			
3. 58	34. 15	4. 44	·1359	10. 53	·03192			
4. 46	33. 10	5. 10	·1364	11. 25	·03200			
7. 11	32. 45	5. 26	·1361	11. 48	·03198			
7. 31	32. 5	6. 11	·1364	12. 11	·03215			
7. 43	32. 40	6. 41	·1372	12. 40	·03204			
7. 56	21. 25	7. 25	·1364	12. 56	·03209			
8. 7	22. 45	7. 35	·1366	13. 25	·03222			
8. 33	30. 40	7. 46	·1358	14. 20	·03224			
9. 4	22. 50	8. 0	·1369	16. 30	·03243			
9. 16	25. 35	8. 15	·1370	16. 57	·03260			
9. 41	24. 45	8. 41	·1355	18. 39	·03266			
10. 3	28. 50	8. 47	·1360	19. 13	·03278			
10. 14	28. 50	8. 57	·1358	19. 41	·03283			
10. 41	30. 0	9. 13	·1374	20. 11	·03296			
11. 8	29. 35	9. 48	·1367	20. 27	·03284			
11. 27	32. 20	10. 12	·1354	21. 19	·03287			
11. 43	29. 0	10. 54	·1360	21. 57	·03277			
12. 11	30. 50	11. 43	·1350	22. 34	·03257			
12. 53	28. 10	12. 12	·1368	23. 15	·03260			
13. 11	28. 55	12. 25	·1364	23. 55	·03248			
13. 26	31. 40	13. 22	·1353	23. 59	·03244			
13. 40	29. 10	13. 42	·1346					
13. 56	29. 5	13. 54	·1348					
14. 11	30. 50	14. 41	·1336					
14. 30:	36. 50	15. 14	·1353					
15. 8	33. 20	16. 12	·1366					
15. 23	33. 30	16. 56	·1358					
15. 56	29. 40	17. 23	·1363					
16. 26	28. 35	18. 40	·1360					
16. 51	30. 30	18. 53	·1355					
17. 7	29. 55	19. 21	·1357					
17. 22	30. 30	19. 43	·1351					
17. 30	31. 40	20. 13	·1355					
17. 37	30. 55	20. 36	·1349					
17. 43	31. 40	20. 45	·1352					
17. 56	30. 55	21. 53	·1344					
18. 20	32. 30	22. 17	·1355					
18. 33	31. 55	22. 42	·1343					
18. 43	32. 40	23. 56	·1357					
18. 51	32. 20	23. 59	·1354					
19. 9	33. 30							
19. 23	32. 45							
19. 41	33. 50							
19. 51	33. 30							
20. 8	35. 5							
20. 17	33. 30							
20. 41	35. 5							
20. 56	33. 30							
21. 0	34. 5							
21. 30	32. 50							
21. 41	33. 40							
21. 53	33. 10							
22. 6	36. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 9								
h m	° ′ ″	h m		h m		h m	°	°
22. 21	20. 36. 40							
22. 34	34. 30							
22. 45	33. 50							
22. 56	35. 20							
23. 9	35. 15							
23. 13	37. 20							
23. 23	36. 40							
23. 46	39. 20							
23. 56	37. 55							
23. 59	38. 15							
Mar. 10		Mar. 10		Mar. 10		Mar. 10		
0. 0	20. 38. 15	0. 0	·1354	0. 0	·03244	1. 0	59·8	60·7
0. 13	39. 35	0. 19	·1361	0. 27	·03252	3. 0	59·8	59·3
0. 26	40. 5	0. 39	·1350	0. 42	·03244	9. 0	59·4	59·2
0. 50	38. 10	1. 13	·1342	1. 49	·03280	21. 0	59·8	60·0
0. 56	38. 10	1. 50	·1359	2. 26	·03277			
1. 7	37. 25	2. 18	·1352	2. 38	·03289			
1. 25	38. 10	2. 37	·1361	3. 11	·03283			
1. 41	37. 40	2. 43	·1353	4. 43	·03305			
1. 50	39. 25	3. 8	·1349	5. 11	·03343			
2. 11	37. 0	3. 16	·1354	5. 25	·03320			
2. 28	37. 0	3. 40	·1351	5. 34	·03323			
2. 39	38. 55	3. 55	·1362	5. 55	·03294			
2. 48	37. 55	4. 12	·1367	6. 14	·03317			
2. 57	37. 55	4. 41	·1353	7. 13	·03316			
3. 8	37. 0	4. 56	·1376	7. 34	·03320			
3. 39	35. 30	5. 12	·1381	7. 53	·03307			
4. 20	38. 0	5. 21	·1366	8. 25	·03316			
4. 38	32. 50	5. 27	·1370	9. 20	·03280			
4. 55	25. 10	5. 41	·1358	9. 43	·03266			
5. 9	26. 5	5. 50	·1336	10. 45	·03252			
5. 15	28. 25	6. 15	·1362	10. 56	·03258			
5. 20	26. 30	6. 42	·1350	11. 24	·03237			
5. 45	35. 10	6. 57	·1353	11. 45	·03220			
6. 0	26. 10	7. 11	·1347	12. 11	·03224			
6. 24	27. 5	7. 26	·1361	13. 13	·03227			
6. 29	26. 20	7. 43	·1346	14. 7	·03246			
6. 38	27. 30	7. 57	·1342	14. 56	·03218			
6. 45	27. 40	8. 12	·1350	15. 40	·03224			
7. 2	30. 50	8. 26	·1362	16. 22	·03243			
7. 23	27. 35	8. 43	·1354	18. 9	·03262			
7. 38	30. 10	8. 55	·1363	21. 56	·03252			
7. 51	29. 15	9. 11	·1357	23. 59	·03236			
8. 7	28. 50	9. 43	·1358					
8. 11	27. 5	10. 0	·1353					
8. 20	25. 30	10. 45	·1355					
8. 28	30. 50	11. 14	·1373					
8. 38	31. 55	11. 34	·1370					
8. 43	31. 20	12. 0	·1354					
8. 59	34. 5	12. 19	·1356					
9. 9	33. 25	12. 41	·1349					
9. 18	33. 50	13. 22	·1350					
9. 36	31. 40	13. 54	·1347					
9. 40	31. 50	14. 13	·1350					
9. 45	30. 45	14. 56	·1345					
9. 55	31. 20	15. 18	·1350					
9. 58	30. 40	15. 43	·1355					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Mar.10		Mar.10							Mar.11		Mar.11						
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
10. 14	20. 30. 55	16. 27	·1354						4. 42	20. 31. 35	8. 12	·1354					
10. 26	28. 50	16. 43	·1357						5. 8	31. 30	8. 22	·1360					
10. 43	23. 0	17. 56	·1351						5. 15	30. 0	8. 43	·1360					
10. 53	25. 55	18. 26	·1354						5. 43	34. 10	9. 5	·1368					
11. 7	26. 30	18. 53	·1349						5. 57	34. 20	9. 15	·1371					
11. 12	26. 10	19. 33	·1351						6. 19	32. 55	9. 43	·1360					
11. 26	28. 0	20. 27	·1339						6. 41	33. 30	10. 12	·1369					
11. 46	24. 10	20. 53	·1346						6. 54	32. 55	10. 57	·1358					
12. 0	26. 25	23. 59	·1361						7. 8	31. 0	11. 34	·1359					
12. 49	30. 5								7. 29	32. 20	11. 41	·1368					
13. 6	27. 10								7. 43	31. 15	11. 48	·1365					
13. 19	26. 55								7. 56	32. 40	12. 5	·1385					
13. 28	28. 5								8. 2	32. 0	12. 20	·1377					
13. 43	28. 50								8. 11	29. 45	12. 37	·1380					
14. 6	34. 0								8. 38	32. 15	13. 12	·1346					
14. 43	38. 5								8. 45	31. 25	13. 26	·1352					
15. 2	35. 50								8. 57	33. 5	14. 41	·1358					
15. 13	35. 10								9. 9	32. 15	15. 55	·1354					
15. 45	29. 20								9. 22	33. 40	16. 11	·1356					
16. 10	28. 25								9. 28	35. 55	16. 44	·1351					
16. 38	29. 40								9. 47	30. 55	17. 38	·1358					
16. 59	29. 30								10. 9	32. 0	17. 55	·1355					
17. 46	30. 40								10. 32	30. 15	18. 29	·1358					
18. 27	30. 50								10. 55	28. 0	18. 46	·1356					
18. 39	30. 30								11. 21	30. 40	20. 56	·1356					
18. 51	29. 45								11. 26	29. 50	23. 11	·1358					
19. 21	29. 40								11. 36	30. 40	23. 24	·1366					
20. 23	31. 15								11. 44	28. 15	23. 41	·1361					
20. 26	30. 20								11. 59	32. 15	23. 59	·1356					
20. 39	30. 20								12. 0	31. 10							
20. 50	31. 40								12. 26	30. 0							
20. 58	31. 30								12. 35	28. 45							
21. 26	33. 0								12. 40	30. 25							
21. 39	32. 50								12. 56	30. 25							
22. 7	33. 55								13. 4	29. 50							
23. 11	36. 10								13. 23	32. 25							
23. 43	36. 25								13. 44	32. 40							
23. 51	37. 30								14. 14	30. 20							
23. 59	37. 15								14. 26	30. 10							
									14. 41	29. 40							
Mar.11		Mar.11		Mar.11		Mar.11			15. 10	31. 5							
0. 0	20. 37. 15	0. 0	·1361	0. 0	·03236	0. 0	60·3	60·0	15. 44	30. 5							
0. 22	38. 25	1. 8	·1360	5. 30	·03315	9. 0	59·8	61·2	15. 56	31. 45							
0. 53	37. 50	1. 25	·1364	6. 57	·03304	21. 0	59·8	60·4	16. 10	30. 55							
1. 0	38. 5	2. 16	·1368	8. 52	·03312				16. 37	32. 40							
1. 12	37. 15	2. 43	·1361	9. 54	·03278				16. 57	30. 45							
1. 23	37. 55	3. 12	·1363	11. 23	·03295				17. 14	32. 5							
1. 45	37. 30	4. 13	·1349	11. 41	·03282				17. 30	30. 55							
2. 22	37. 25	4. 39	·1347	11. 52	·03285				18. 23	31. 10							
2. 33	36. 20	4. 57	·1357	12. 14	·03264				18. 39	30. 20							
3. 16	36. 0	5. 11	·1354	12. 50	·03245				19. 5	30. 30							
3. 26	35. 40	5. 34	·1361	13. 12	·03257				19. 14	29. 55							
3. 38	35. 50	6. 4	·1356	15. 43	·03276				19. 24	30. 10							
3. 53	34. 55	6. 40	·1362	19. 41	·03265				19. 27	29. 30							
4. 7	35. 5	6. 58	·1358	21. 36	·03243				20. 57	30. 45							
4. 13	33. 0	7. 21	·1364	23. 39	·03202				21. 11	32. 0							
4. 23	32. 30	7. 39	·1362	23. 59	·03209				21. 43	32. 55							
4. 31	33. 5	7. 46	·1365						22. 11	32. 50							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Mar.11	
h m	° ′ ″
22. 24	20. 33. 35
23. 12	34. 55
23. 24	37. 10
23. 31	37. 10
23. 59	36. 25
Mar.12	
0. 0	20. 36. 25
0. 9	35. 55
0. 44	36. 30
1. 13	36. 30
1. 46:	36. 0
1. 59	38. 5
2. 11	36. 15
2. 31	38. 0
2. 43	36. 50
2. 56	36. 55
3. 8	35. 55
3. 13	36. 0
3. 26	36. 50
3. 43	35. 50
3. 48	36. 0
3. 59	35. 25
	***
4. 42	36. 35
5. 16	34. 40
5. 26	35. 30
5. 39	35. 35
5. 55	33. 20
6. 4	29. 5
6. 15	29. 45
6. 37	33. 25
6. 49	33. 45
6. 55	32. 45
7. 29	32. 50
7. 53	31. 0
8. 31	32. 40
8. 41	32. 0
9. 20	31. 40
10. 39	32. 50
12. 4	32. 30
12. 13	33. 10
12. 41	32. 5
13. 48	32. 5
15. 8	31. 25
15. 26:	32. 15
15. 57	29. 55
16. 9	30. 55
16. 15	30. 40
16. 27	31. 50
16. 51	30. 25
16. 56	30. 50
17. 5	30. 15
17. 14	30. 50
17. 36	30. 20
17. 41	30. 40
17. 56	30. 5
18. 19	30. 35

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Mar.12	
0. 0	·1356
1. 9	·1359
1. 13	·1364
1. 19	·1359
1. 44	·1362
1. 57	·1370
2. 12	·1364
2. 33	·1372
2. 52	·1366
3. 10	·1362
3. 25	·1369
3. 57	·1362
4. 12	·1364
4. 20	·1370
4. 38	·1368
4. 52	·1355
5. 11	·1354
5. 18	·1362
5. 33	·1358
5. 55	·1350
6. 6	·1361
6. 20	·1366
6. 44	·1362
6. 57	·1365
7. 50	·1365
8. 11	·1368
8. 25	·1365
8. 45	·1367
8. 56	·1366
9. 35	·1369
10. 17	·1364
10. 57	·1365
11. 41	·1362
12. 30	·1364
13. 11	·1361
15. 44	·1363
16. 12	·1361
17. 56	·1364
19. 18	·1362
19. 43	·1356
20. 12	·1358
20. 47	·1354
22. 38	·1358
23. 6	·1353
23. 22	·1355
23. 59	·1362

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Mar.12	
0. 0	·03209
2. 4	·03260
2. 14	·03248
2. 36	·03257
3. 11	·03240
3. 27	·03244
4. 7	·03240
4. 37	·03257
4. 58	·03246
5. 23	·03263
6. 11	·03267
7. 4	·03256
10. 11	·03227
12. 28	·03236
14. 41	·03226
15. 54	·03217
21. 26	·03197
23. 5	·03177
23. 59	·03182

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
Mar.12		
1. 0	59 ·9	60 ·8
3. 0	59 ·4	60 ·1
9. 0	58 ·0	59 ·0
21. 0	58 ·8	58 ·8

Greenwich Mean Solar Time.	Western Declination.
Mar.12	
h m	° ′ ″
18. 56	20. 30. 20
19. 4	29. 40
19. 11	30. 40
19. 32	30. 30
20. 10	30. 55
20. 26	32. 10
20. 41	31. 15
21. 50	34. 25
22. 26	35. 10
22. 58	37. 30
23. 8	37. 5
23. 21	37. 50
23. 59	37. 50
Mar.13	
0. 0	20. 37. 50
0. 28	37. 45
0. 53	38. 40
1. 16	38. 25
2. 0	39. 30
3. 19	35. 50
3. 26	36. 0
3. 57	33. 30
4. 58	34. 10
5. 15	34. 0
5. 29	33. 15
6. 10	34. 5
6. 49	34. 15
6. 57	33. 50
7. 11	33. 40
7. 23	34. 10
7. 37	33. 15
7. 58	33. 10
8. 13	34. 0
9. 0	33. 5
12. 29	32. 0
12. 56	32. 25
13. 35	31. 20
13. 53	31. 50
14. 10	31. 20
14. 27	33. 0
15. 3	30. 50
	***
16. 55	30. 35
16. 59	30. 55
17. 14	30. 10
18. 16	29. 55
18. 48	32. 30
18. 54	33. 20
19. 12	34. 0
19. 37	33. 0
19. 43	33. 55
19. 55	32. 0
20. 11	33. 30
20. 34	34. 5
20. 43	33. 30
21. 8	34. 15
21. 30	34. 5

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Mar.13	
0. 0	·1362
1. 14	·1366
3. 26	·1371
4. 15	·1363
4. 26	·1366
5. 27	·1362
5. 41	·1366
5. 57	·1365
6. 11	·1369
6. 46	·1365
7. 23	·1368
7. 40	·1364
7. 59	·1370
8. 12	·1375
8. 23	·1368
8. 34	·1371
8. 48	·1369
8. 56	·1371
10. 56	·1367
11. 22	·1364
11. 43	·1367
12. 3	·1363
13. 0	·1365
13. 21	·1361
14. 20	·1361
14. 51	·1363
16. 49	·1359
17. 54	·1363
18. 52	·1359
19. 55	·1356
20. 12	·1364
21. 11	·1362
21. 45	·1358
23. 18	·1360
23. 45	·1356
23. 59	·1355

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Mar.13	
0. 0	·03182
3. 28	·03219
4. 45	·03224
9. 0	·03207
10. 11	·03203
12. 10	·03238
14. 27	·03266
19. 11	·03277
22. 36	·03270
23. 59	·03226

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
Mar.13		
1. 0	58 ·9	59 ·0
3. 0	58 ·9	59 ·7
9. 0	58 ·8	59 ·0
21. 0	60 ·6	61 ·0
22. 0	60 ·5	60 ·5
23. 0	59 ·5	59 ·1

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.13								
h m	° ′ ″	h m		h m		h m	°	°
22. 9	20. 35. 20							
22. 23	35. 20							
23. 28	39. 25							
23. 59	38. 55							
Mar.14		Mar.14		Mar.14		Mar.14		
0. 0	20. 38. 55	0. 0	·1355	0. 0	·03226	0. 0	59 ·8	59 ·6
0. 29	38. 25	0. 43	·1358	2. 41	·03242	1. 0	59 ·9	60 ·7
0. 41	38. 50	1. 0	·1353	3. 13	·03264	2. 0	59 ·6	59 ·5
1. 1	37. 45	2. 22	·1358	3. 26	·03252	3. 0	59 ·6	59 ·3
1. 38	37. 25	2. 36	·1355	3. 42	·03257	9. 0	59 ·0	59 ·0
1. 49	36. 30	3. 4	·1362	4. 43	·03250	21. 0	58 ·8	59 ·0
2. 26	36. 55	3. 14	·1368	7. 45	·03226	22. 0	58 ·3	58 ·0
2. 32	36. 10	3. 26	·1354	7. 54	·03238	23. 0	57 ·8	58 ·0
2. 56	37. 35	3. 41	·1356	10. 8	·03220			
3. 6	37. 35	3. 56	·1352	12. 44	·03236			
3. 12	38. 40	4. 22	·1358	19. 25	·03222			
3. 26	36. 50	4. 44	·1351	21. 14	·03217			
3. 40	37. 20	5. 30	·1362	22. 8	·03200			
3. 54	36. 40	5. 43	·1359	23. 59	·03166			
4. 7	37. 15	6. 12	·1367					
5. 0	34. 30	7. 25	·1369					
5. 26	34. 20	7. 42	·1364					
5. 37	34. 30	7. 53	·1372					
5. 41	34. 25	8. 12	·1368					
6. 9	35. 20	8. 57	·1369					
6. 58	35. 0	9. 25	·1363					
7. 33	34. 15	14. 53	·1362					
7. 39	33. 30	18. 20	·1367					
7. 43	34. 0	18. 57	·1365					
8. 32	34. 0	19. 18	·1365					
9. 14	33. 0	19. 55	·1364					
13. 21	32. 30	20. 12	·1360					
14. 36	32. 0	21. 5	·1356					
15. 10	32. 30	21. 53	·1360					
15. 19	31. 25	23. 28	·1361					
15. 26	32. 0	23. 59	·1366					
15. 38	31. 30							
16. 40	30. 50							
17. 38	31. 15							
17. 41	30. 40							
17. 55	31. 25							
18. 27	31. 10							
19. 8	30. 20							
19. 40	31. 0							
19. 53	30. 30							
19. 59	31. 10							
20. 7	30. 55							
20. 42	32. 20							
20. 56	31. 50							
21. 25	32. 10							
22. 38	35. 0							
22. 43	34. 55							
23. 5	35. 55							
23. 23	35. 30							
23. 50	36. 45							
23. 59	36. 10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.15		Mar.15		Mar.15		Mar.15		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 36. 10	0. 0	·1366	0. 0	·03166	0. 0	57 ·6	57 ·5
0. 51	36. 0	0. 25	·1365	2. 53	·03184	1. 0	58 ·0	58 ·0
1. 9	35. 20	1. 34	·1366	3. 43	·03210	2. 0	58 ·1	59 ·0
1. 54	35. 40	2. 55	·1358	9. 42	·03209	3. 0	58 ·3	59 ·5
2. 29	34. 50	3. 41	·1360	12. 51	·03209	9. 0	58 ·8	60 ·0
3. 9	33. 0	4. 12	·1355	12. 55	·03216	21. 0	58 ·8	59 ·0
4. 7	32. 5	4. 41	·1353	13. 8	·03203			
4. 14	32. 50	6. 56	·1366	15. 24	·03207			
4. 23	32. 25	10. 55	·1363	16. 13	·03202			
4. 30	32. 50	12. 53	·1364	17. 57	·03211			
4. 40	31. 40	13. 0	·1378	18. 29	·03193			
6. 29	33. 5	13. 19	·1372	19. 26	·03199			
6. 51	32. 55	13. 56	·1375	20. 0	·03196			
9. 41	32. 55		***	22. 11	·03216			
10. 27	32. 10	15. 12	·1370	23. 59	·03202			
11. 26	32. 30	16. 12	·1378					
12. 7	31. 40	16. 35	·1370					
12. 40	32. 30	16. 58	·1375					
12. 46	32. 15	17. 22	·1374					
12. 53	32. 50	17. 52	·1365					
13. 19	30. 55	18. 21	·1369					
13. 26	31. 20	18. 52	·1361					
14. 7	30. 20	19. 33	·1368					
14. 16	30. 35	20. 12	·1360					
	***	21. 25	·1353					
15. 7	30. 5	21. 41	·1356					
15. 23	30. 35	22. 40	·1353					
15. 26	30. 5	23. 6	·1356					
15. 54	30. 0	23. 26	·1355					
15. 59	28. 40	23. 47	·1365					
16. 11	28. 40	23. 59	·1361					
16. 43	30. 5							
17. 8	28. 5							
17. 21	29. 20							
18. 0	37. 25							
18. 8	37. 40							
18. 30	32. 0							
18. 38	32. 15							
18. 51	31. 25							
18. 59	32. 15							
	***							
19. 41	34. 0							
20. 11	31. 20							
20. 23	32. 5							
20. 47	31. 20							
21. 25	32. 0							
21. 41	33. 20							
21. 45	32. 30							
	***							
23. 14	34. 50							
23. 29	34. 5							
23. 36	36. 20							
23. 42	36. 0							
23. 53	37. 5							
23. 59	36. 30							
Mar.16		Mar.16		Mar.16		Mar.16		
0. 0	20. 36. 30	0. 0	·1361	0. 0	·03202	1. 0	59 ·5	60 ·5
0. 6	35. 40	0. 12	·1360	2. 6	·03246	3. 0	58 ·8	60 ·2

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.16		Mar.16		Mar.16		Mar.16		
h m	° ′ ″	h m		h m		h m	°	°
0. 12	20. 36. 0	1. 12	·1363	2. 20	·03243	9. 0	60·1	60·7
0. 24	35. 20	2. 19	·1356	3. 12	·03257	21. 0	59·9	60·7
1. 18	36. 50	2. 36	·1360	3. 56	·03253			
1. 36	35. 30	2. 53	·1359	4. 6	·03272			
1. 41	37. 10	3. 18	·1366	4. 9	·03252			
1. 44	36. 10	3. 55	·1367	4. 11	·03265			
2. 0	37. 40	4. 11	·1390	4. 13	·03256			
2. 12	37. 0	4. 12	·1373	6. 21	·03247			
2. 22	35. 25	4. 29	·1368	6. 41	·03263			
2. 56	33. 40	4. 57	·1371	7. 53	·03266			
3. 53	33. 15	5. 15	·1365	8. 25	·03257			
3. 59	36. 5	5. 56	·1364	8. 57	·03266			
4. 1	33. 30	6. 20	·1354	9. 53	·03257			
4. 5	34. 50	6. 39	·1368	10. 26	·03260			
4. 12	33. 10	6. 43	·1375	11. 17	·03245			
4. 31	33. 50	6. 56	·1369	11. 41	·03252			
5. 4	32. 40	7. 11	·1373	11. 50	·03245			
5. 37	33. 25	7. 36	·1362	12. 11	·03240			
5. 51	33. 0	8. 6	·1368	12. 33	·03243			
6. 7	33. 0	8. 22	·1356	12. 57	·03236			
6. 33	26. 5	8. 39	·1363	13. 28	·03256			
6. 53	24. 40	8. 54	·1358	13. 53	·03207			
7. 0	23. 20	9. 12	·1360	14. 14	·03202			
7. 21	23. 45	9. 23	·1367	14. 41	·03217			
7. 33	25. 55	9. 39	·1362	15. 45	·03237			
7. 44	30. 15	9. 43	·1366	19. 36	·03243			
7. 53	30. 15	9. 54	·1362	21. 9	·03237			
7. 58	31. 10	10. 11	·1368	21. 54	·03243			
8. 9	31. 10	10. 43	·1366	23. 59	·03214			
8. 28	29. 40	10. 55	·1360					
8. 56	30. 0	11. 9	·1363					
9. 22	26. 30	11. 22	·1356					
9. 34	27. 15	11. 41	·1362					
10. 0	19. 55	11. 52	·1374					
10. 46	28. 45	12. 18	·1364					
10. 58	28. 25	12. 54	·1368					
11. 12	30. 10	13. 14	·1360					
11. 21	29. 30	13. 41	·1390					
11. 33	31. 0	13. 51	·1402					
11. 46	30. 20	14. 11	·1387					
12. 8	32. 50	14. 42	·1363					
12. 14	32. 35	15. 10	·1366					
12. 38	34. 20	17. 13	·1368					
13. 6	29. 55	18. 11	·1376					
13. 16	31. 55	18. 40	·1375					
13. 29	36. 10	18. 58	·1377					
13. 43	34. 0	20. 5	·1370					
13. 57:	28. 0	20. 41	·1374					
14. 11	25. 25	20. 55	·1366					
14. 56	29. 10	21. 6	·1369					
15. 11	28. 5	21. 22	·1355					
15. 27	28. 30	21. 53	·1370					
15. 34	27. 35	22. 2	·1356					
15. 41	27. 50	22. 12	·1352					
15. 52	30. 10	23. 13	·1354					
16. 4	29. 55	23. 59	·1360					
16. 23	30. 10							
16. 41	30. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.16								
h m	° ′ ″	h m		h m		h m	°	°
16. 57	20. 31. 20							
17. 9	30. 25							
17. 28	30. 25							
17. 43	31. 30							
17. 54	31. 30							
17. 58	31. 0							
18. 2	29. 40							
18. 10	31. 15							
18. 20	30. 0							
18. 26	30. 0							
18. 43	29. 10							
18. 54	29. 50							
18. 59	29. 15							
19. 10	29. 25							
19. 23	28. 30							
19. 41	28. 30							
19. 57	27. 5							
	***							
20. 23	28. 15							
20. 41	29. 5							
20. 43	27. 30							
20. 49	27. 30							
20. 57	29. 50							
20. 59	28. 45							
21. 8	29. 40							
21. 26	29. 5							
22. 14	31. 40							
22. 26	31. 25							
23. 12	34. 0							
23. 26	36. 5							
23. 33	35. 30							
23. 49	36. 55							
23. 59	36. 25							
Mar.17		Mar.17		Mar.17		Mar.17		
0. 0	20. 36. 25	0. 0	·1360	0. 0	·03214	1. 0	60·0	61·0
0. 7	38. 0	0. 15	·1366	0. 14	·03229	3. 0	60·3	60·2
0. 22	38. 30	0. 18	·1366	0. 41	·03221	9. 0	59·8	60·0
0. 38	39. 30	0. 46	·1363	1. 3	·03240	21. 0	58·8	59·0
0. 41	39. 0	0. 59	·1373	1. 35	·03245			
0. 55	41. 30	1. 10	·1368	1. 41	·03240			
1. 12	40. 5	1. 35	·1361	2. 11	·03272			
1. 27	41. 20	1. 54	·1347	2. 28	·03277			
1. 34	39. 45	2. 6	·1356	2. 35	·03266			
1. 40	39. 45	2. 12	·1350	2. 53	·03278			
1. 48	40. 40	2. 26	·1360	2. 56	·03267			
1. 59	40. 40	2. 36	·1356	5. 0	·03337			
2. 11	35. 50	2. 50	·1363	5. 57	·03296			
2. 21	35. 0	3. 26	·1367	6. 34	·03276			
2. 26	36. 10	3. 43	·1358	9. 11	·03242			
2. 32	34. 55	4. 17	·1375	9. 41	·03213			
2. 41	34. 55	4. 57	·1354	10. 30	·03217			
2. 49	35. 50	5. 12	·1365	11. 51	·03220			
2. 53	33. 15	5. 20	·1360	12. 38	·03153			
2. 56	34. 15	5. 30	·1368	12. 53	·03159			
2. 58	33. 15	6. 0	·1358	13. 13	·03143			
3. 6	34. 40	6. 12	·1365	14. 12	·03184			
3. 11	34. 5	6. 41	·1362	15. 16	·03177			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.17		Mar.17		Mar.17				
h m	° ′ ″	h m		h m		h m	°	°
3. 26	20. 35. 35	6. 55	·1364	18. 0	·03198			
3. 43	35. 5	7. 43	·1360	18. 27	·03184			
4. 12	37. 50	8. 25	·1368	21. 54	·03164			
4. 27	36. 25	8. 50	·1383	23. 59	·03162			
4. 33	37. 10	9. 0	·1376					
4. 41	35. 35	9. 26	·1394					
5. 2	21. 25	9. 43	·1377					
5. 12	24. 10	10. 0	·1371					
5. 17	23. 15	10. 22	·1358					
5. 34	28. 30	10. 41	·1364					
5. 53	32. 20	10. 54	·1361					
5. 59	31. 35	11. 13	·1364					
6. 23	33. 0	11. 27	·1362					
6. 27	32. 30	11. 45	·1366					
7. 8	34. 0	12. 11	·1374					
7. 47	32. 50	12. 35	·1369					
7. 56	31. 25	13. 0	·1377					
8. 22	27. 0	13. 48	·1343					
8. 36	25. 55	13. 57	·1346					
8. 56	28. 30	14. 10	·1344					
9. 4	28. 10	14. 51	·1369					
9. 28	32. 0	15. 11	·1369					
9. 32	30. 55	15. 56	·1357					
9. 50	30. 0	16. 20	·1354					
10. 2	32. 25	16. 41	·1358					
10. 17	30. 40	16. 57	·1355					
10. 32	31. 55	17. 27	·1360					
10. 54	30. 30	17. 43	·1359					
11. 22	30. 55	18. 11	·1368					
11. 27	32. 25	18. 29	·1358					
11. 30	32. 25	18. 36	·1363					
12. 8	42. 25	18. 49	·1362					
12. 13	42. 10	18. 55	·1357					
12. 38	33. 30	19. 43	·1357					
12. 53	31. 25	20. 25	·1359					
13. 0	32. 10	20. 41	·1355					
13. 15	29. 10	20. 51	·1361					
13. 23	24. 50	21. 4	·1350					
13. 43	23. 40	21. 6	·1355					
13. 56	28. 45	21. 41	·1355					
14. 14	31. 0	22. 6	·1347					
14. 40	29. 25	22. 26	·1352					
14. 59	28. 25	23. 19	·1355					
15. 24	26. 25	23. 26	·1347					
15. 33	26. 55	23. 44	·1352					
15. 41	26. 0	23. 59	·1341					
15. 49	26. 10							
16. 8	28. 50							
16. 12	28. 5							
16. 32	31. 10							
16. 39	30. 0							
16. 43	30. 0							
16. 53	31. 10							
16. 59	30. 20							
17. 30	30. 40							
17. 38	29. 25							
17. 43	29. 5							
18. 7	32. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar.17								
h m	° ′ ″	h m		h m		h m	°	°
18. 13	20. 31. 25							
18. 21	30. 20							
18. 26	31. 35							
18. 33	31. 5							
18. 40	31. 45							
18. 45	31. 20							
18. 55	32. 15							
19. 8	31. 30							
19. 18	31. 40							
19. 58	30. 25							
19. 59	30. 50							
20. 5	29. 35							
20. 10	30. 35							
20. 16	29. 20							
20. 20	30. 25							
20. 26	30. 25							
20. 30	30. 0							
20. 39	30. 5							
20. 43	31. 25							
20. 51	31. 15							
20. 53	29. 15							
20. 58	29. 40							
21. 8	29. 30							
21. 14	30. 45							
21. 21	29. 55							
21. 43	32. 20							
21. 58	31. 30							
22. 10	31. 30							
22. 26	33. 15							
22. 33	32. 20							
22. 43	34. 0							
23. 53	38. 30							
23. 59	40. 40							
Mar.18		Mar.18		Mar.18		Mar.18		
0. 0	20. 40. 40	0. 0	·1341	0. 0	·03162	0. 20	59 ·4	60 ·2
0. 7	40. 30	0. 24	·1349	0. 11	·03177	9. 0	58 ·3	58 ·5
0. 16	38. 20	0. 56	·1361	0. 23	·03164	21. 0	60 ·1	61 ·6
0. 33	38. 0	1. 50	·1366	1. 12	·03196			
0. 51	38. 20	1. 56	·1362	3. 42	·03212			
1. 23	40. 0	2. 11	·1366	3. 58	·03208			
1. 42	40. 0	2. 35	·1368	4. 12	·03226			
1. 50	40. 40	2. 41	·1360	4. 22	·03217			
1. 56	39. 40	3. 25	·1370	4. 58	·03226			
2. 10	40. 0	3. 54	·1368	5. 12	·03216			
2. 17	39. 25	4. 11	·1395	5. 43	·03216			
2. 26	40. 0	4. 21	·1382	5. 55	·03205			
2. 43	38. 50	4. 27	·1387	6. 44	·03212			
2. 56	38. 50	4. 38	·1379	7. 0	·03200			
3. 8	36. 25	4. 44	·1376	7. 8	·03240			
3. 16	35. 35	4. 55	·1380	7. 15	·03252			
3. 26	36. 0	5. 14	·1361	7. 29	·03237			
3. 39	35. 30	5. 45	·1373	7. 54	·03197			
3. 53	34. 0	5. 56	·1370	8. 11	·03200			
3. 56	33. 30	6. 12	·1374	8. 29	·03177			
4. 0	34. 20	6. 26	·1385	9. 9	·03172			
4. 29	32. 15	6. 36	·1393	9. 33	·03147			
4. 43	34. 50	6. 44	·1388	9. 51	·03163			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 18		Mar. 18		Mar. 18				
h m	° ′ ″	h m		h m		h m	°	°
5. 9	20. 36. 40	6. 58	·1355	9. 56	·03160			
5. 33	34. 50	7. 11	·1370	10. 12	·03175			
6. 14	36. 25	7. 13	·1365	11. 8	·03131			
6. 36	35. 0	7. 40	·1393	11. 21	·03136			
6. 41	33. 25	7. 55	·1375	11. 27	·03130			
6. 55	36. 50	8. 14	·1385	11. 41	·03083			
7. 9	20. 30	8. 24	·1389	12. 0	·03105			
7. 13	20. 10	8. 29	·1376	12. 16	·03100			
7. 28	15. 10	9. 3	·1356	12. 59	·03137			
7. 47	27. 10	9. 12	·1365	13. 14	·03126			
7. 58	27. 5	9. 24	·1367	13. 30	·03135			
8. 2	26. 0	9. 42	·1353	13. 55	·03121			
8. 14	30. 40	9. 56	·1357	14. 29	·03136			
8. 25	29. 40	10. 10	·1354	14. 45	·03126			
8. 31	29. 40	10. 20	·1365	15. 7	·03137			
8. 42	30. 0	10. 41	·1355	15. 29	·03122			
8. 54	32. 15	10. 59	·1347	15. 57	·03120			
9. 11	29. 0	11. 21	·1309	16. 14	·03096			
9. 23	29. 0	11. 40	·1339	16. 24	·03096			
9. 27	26. 5	11. 47	·1341	16. 40	·03126			
9. 32	26. 5	12. 10	·1374	16. 56	·03137			
9. 41	24. 30	12. 23	·1335	17. 26	·03172			
9. 46	24. 55	12. 39	·1339	18. 22	·03200			
10. 1	23. 25	12. 50	·1338	19. 27	·03223			
10. 12	24. 15	13. 12	·1358	21. 7	·03206			
10. 20	26. 30	13. 26	·1350	21. 51	·03221			
10. 30	26. 30	13. 42	·1357	22. 20	·03206			
10. 39	24. 55	14. 6	·1343	23. 59	·03214			
10. 51	22. 50	14. 29	·1342					
10. 59	27. 15	14. 50	·1348					
11. 7	20. 10	15. 6	·1347					
	(†)	15. 12	·1351					
11. 33	15. 55	15. 44	·1326					
11. 39	18. 25	15. 57	·1314					
11. 48	13. 40	16. 6	·1321					
12. 11	30. 45	16. 12	·1319					
12. 20	24. 25	16. 54	·1340					
12. 36	27. 0	17. 42	·1357					
12. 52	21. 20	17. 55	·1355					
13. 5	23. 55	18. 52	·1367					
13. 13	21. 30	19. 12	·1358					
13. 22	18. 20	19. 16	·1370					
13. 49	19. 25	19. 21	·1360					
14. 9	25. 10	19. 42	·1355					
14. 24	27. 25	19. 49	·1359					
14. 35	27. 50	20. 11	·1350					
14. 43	26. 35	20. 14	·1353					
14. 58	26. 5	20. 47	·1339					
15. 11	31. 30	21. 6	·1317					
15. 19	33. 0	21. 18	·1315					
15. 27	30. 10	21. 34	·1327					
15. 35	29. 55	21. 41	·1321					
15. 43	33. 20	21. 55	·1329					
15. 58	36. 15	22. 21	·1316					
16. 9	34. 0	22. 30	·1320					
16. 12	33. 50	23. 6	·1316					
16. 21	32. 30	23. 14	·1324					
16. 34	34. 35	23. 22	·1321					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 18		Mar. 18						
h m	° ′ ″	h m		h m		h m	°	°
16. 42	20. 33. 10	23. 35	·1327					
16. 46	33. 50	23. 59	·1336					
16. 54	32. 0							
17. 7	31. 45							
17. 26	33. 10							
17. 34	33. 0							
17. 50	30. 50							
18. 12	30. 5							
18. 14	29. 0							
18. 17	30. 25							
18. 28	30. 40							
18. 37	29. 15							
18. 42	31. 10							
19. 2	30. 20							
19. 9	28. 40							
19. 12	32. 25							
19. 21	32. 10							
19. 25	30. 50							
19. 39	30. 20							
19. 51	31. 40							
19. 56	29. 20							
19. 59	28. 40							
20. 16	30. 0							
20. 24	28. 10							
20. 27	30. 5							
20. 33	28. 30							
20. 58	32. 25							
21. 3	32. 0							
21. 12	34. 10							
21. 22	32. 45							
21. 26	33. 45							
21. 28	36. 10							
21. 40	32. 25							
21. 51	35. 10							
22. 6:	33. 45							
22. 27	36. 55							
22. 46	37. 40							
22. 58	37. 25							
23. 9	37. 45							
23. 14	37. 30							
23. 23	39. 20							
23. 28	39. 10							
23. 55	41. 55							
23. 59	42. 0							
Mar. 19		Mar. 19		Mar. 19		Mar. 19		
0. 0	20. 42. 0	0. 0	·1336	0. 0	·03214	1. 0	60·0	60·0
0. 21	43. 10	0. 18	·1338	0. 11	·03213	3. 0	59·8	60·7
0. 28	48. 0	0. 26	·1335	0. 26	·03224	9. 0	58·8	59·0
0. 33	45. 55	0. 41	·1353	0. 36	·03276	21. 0	59·8	60·5
0. 39	39. 15	0. 43	·1335	0. 40	·03264			
0. 42	40. 45	0. 48	·1346	0. 53	·03293			
0. 46	31. 0	0. 55	·1351	1. 11	·03303			
1. 8	32. 40	0. 57	·1346	1. 20	·03285			
1. 10	34. 20	1. 10	·1352	1. 51	·03278			
1. 16	36. 15	1. 16	·1347	2. 0	·03295			
1. 23	36. 15	1. 42	·1362	2. 11	·03279			
1. 33	40. 30	1. 59	·1356	2. 40	·03338			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 19		Mar. 19		Mar. 19				
h m	° ′ ″	h m		h m		h m	°	°
1. 47	20. 41. 40	2. 13	·1326	2. 53	·03342			
1. 54	44. 0	2. 15	·1332	3. 51	·03273			
2. 8	52. 40	2. 20	·1326	4. 11	·03278			
2. 21	43. 55	2. 43	·1358	4. 30	·03255			
2. 24	43. 20	3. 8	·1369	4. 41	·03262			
2. 29	36. 55	3. 14	·1366	4. 53	·03246			
2. 36	32. 40	3. 30	·1366	5. 40	·03218			
2. 48	31. 10	3. 48	·1358	5. 45	·03222			
2. 56	32. 10	4. 11	·1367	5. 54	·03216			
3. 1	30. 55	4. 26	·1350	6. 9	·03219			
3. 5	32. 0	4. 41	·1365	6. 15	·03214			
4. 11	40. 25	4. 44	·1355	6. 43	·03203			
4. 25	37. 30	4. 56	·1362	7. 12	·03215			
4. 39	37. 5	5. 35	·1360	10. 11	·03187			
4. 46	36. 25	5. 43	·1371	12. 28	·03223			
5. 31	35. 20	5. 52	·1363	14. 22	·03242			
6. 6	35. 5	6. 8	·1367	17. 4	·03245			
6. 13	35. 40	6. 20	·1359	19. 54	·03223			
6. 26	34. 35	6. 25	·1354	21. 44	·03202			
6. 39	34. 10	6. 43	·1365	22. 27	·03200			
6. 43	34. 40	6. 56	·1371	23. 59	·03158			
6. 53	33. 40	7. 5	·1368					
7. 12	35. 15	7. 12	·1374					
7. 26	34. 40	7. 26	·1369					
7. 33	35. 0	7. 51	·1369					
8. 16	34. 0	8. 6	·1375					
9. 11	33. 0	8. 15	·1369					
9. 36	33. 10	8. 29	·1375					
10. 28	31. 55	8. 37	·1371					
12. 15	31. 50	8. 43	·1373					
13. 24	31. 5	9. 6	·1364					
13. 42	31. 30	9. 14	·1361					
13. 58	31. 0	9. 36	·1366					
14. 21	31. 30	10. 12	·1368					
15. 21	30. 55	10. 20	·1365					
15. 33	31. 50	10. 41	·1363					
	***	11. 26	·1366					
16. 26	30. 30	14. 10	·1357					
16. 37	31. 35	18. 12	·1358					
16. 41	30. 55	18. 50	·1355					
16. 56	30. 55	19. 11	·1357					
17. 2	31. 30	19. 55	·1344					
17. 16	30. 40	21. 12	·1353					
17. 38	30. 40	21. 40	·1349					
17. 54	31. 15	22. 9	·1339					
18. 13	31. 15	22. 42	·1355					
18. 39	29. 40	23. 11	·1357					
18. 54	30. 10	23. 14	·1364					
19. 20	29. 0	23. 22	·1360					
19. 27	30. 25	23. 59	·1365					
19. 38	30. 0							
19. 51	31. 45							
19. 55	31. 30							
20. 9	32. 55							
20. 13	32. 25							
20. 20	33. 10							
20. 39	32. 30							
20. 56	33. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 19								
h m	° ′ ″	h m		h m		h m	°	°
21. 21	20. 32. 20							
21. 24	32. 45							
21. 40	32. 30							
22. 32	35. 30							
22. 51	34. 25							
23. 6	36. 20							
23. 9	35. 25							
23. 16	36. 5							
23. 24	35. 35							
23. 41	37. 40							
23. 45	37. 30							
23. 59	38. 45							
Mar. 20		Mar. 20		Mar. 20		Mar. 20		
0. 0	20. 38. 45	0. 0	·1365	0. 0	·03158	1. 0	58·8	59·2
0. 16	39. 0	0. 23	·1366	0. 29	·03148	3. 0	59·0	59·6
0. 26	37. 40	0. 40	·1355	1. 56	·03162	9. 0	58·6	59·2
0. 51	36. 5	0. 54	·1351	2. 19	·03183	21. 0	57·4	58·0
1. 40	36. 40	1. 17	·1359	2. 42	·03191	22. 0	57·6	57·2
1. 49	36. 5	1. 44	·1362	4. 27	·03258	23. 0	56·8	56·0
	***	2. 11	·1372	5. 6	·03223			
2. 11	39. 55	2. 27	·1375	5. 41	·03226			
2. 26	40. 25	2. 55	·1365	5. 52	·03238			
2. 29	40. 0	3. 12	·1351	6. 15	·03222			
2. 41	39. 55	3. 40	·1347	6. 41	·03238			
2. 51	41. 35	3. 45	·1341	6. 46	·03223			
2. 59	41. 0	4. 4	·1347	6. 55	·03232			
3. 6	39. 55	4. 30	·1361	7. 12	·03182			
3. 18	40. 10	4. 50	·1351	7. 26	·03197			
3. 24	37. 45	5. 5	·1358	8. 5	·03158			
3. 28	37. 40	5. 14	·1354	8. 19	·03164			
3. 41	33. 0	5. 27	·1361	9. 22	·03180			
	***	5. 39	·1355	9. 41	·03162			
4. 3	31. 35	5. 53	·1379	10. 12	·03166			
4. 26	34. 10	6. 26	·1353	10. 41	·03157			
4. 28	35. 30	6. 41	·1369	10. 44	·03163			
4. 33	35. 55	6. 45	·1364	11. 10	·03137			
4. 41	35. 0	6. 56	·1391	11. 26	·03137			
4. 51	34. 40	7. 12	·1353	11. 41	·03117			
4. 59	34. 50	7. 21	·1388	13. 9	·03120			
5. 11	34. 10	7. 33	·1402	13. 25	·03114			
5. 23	34. 30	7. 54	·1382	13. 57	·03123			
5. 32	32. 40	8. 0	·1360	14. 28	·03118			
5. 40	27. 30	8. 10	·1367	14. 45	·03123			
5. 44	27. 15	8. 26	·1354	16. 54	·03112			
6. 8	31. 5	8. 41	·1341	17. 3	·03110			
6. 26	29. 20	9. 3	·1353	17. 56	·03122			
6. 35	27. 30	9. 12	·1364	19. 56	·03106			
6. 42	24. 50	9. 18	·1361	20. 50	·03098			
6. 46	29. 50	9. 25	·1368	22. 14	·03088			
6. 57	23. 0	9. 42	·1355	23. 59	·03058			
7. 0	30. 0	10. 21	·1367					
7. 6	31. 35	10. 39	·1367					
7. 14	28. 30	10. 43	·1361					
7. 18	18. 10	10. 53	·1377					
7. 27	19. 30	11. 13	·1357					
7. 30	18. 30	11. 28	·1364					
7. 35	21. 55	11. 43	·1359					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 20		Mar. 20						
h m	° ′ ″	h m		h m		h m	°	°
7. 49	20. 26. 0	11. 50	·1364					
7. 57	28. 10	12. 3	·1366					
8. 8	24. 0	12. 25	·1361					
8. 23	29. 0	12. 38	·1364					
8. 36	32. 30	13. 6	·1357					
9. 8	27. 25	13. 19	·1360					
9. 15	29. 40	13. 31	·1356					
9. 26	34. 35	14. 27	·1349					
9. 47	29. 5	15. 20	·1359					
10. 4	29. 15	16. 26	·1349					
10. 11	30. 10	16. 49	·1357					
10. 28	29. 30	17. 12	·1355					
10. 33	29. 40	17. 18	·1357					
10. 39	28. 45	18. 55	·1363					
10. 56	34. 55	19. 18	·1359					
11. 3	33. 30	20. 0	·1350					
11. 23	35. 35	20. 41	·1354					
11. 29	34. 55	21. 44	·1350					
11. 34	32. 50	23. 50	·1351					
11. 42	33. 25	23. 59	·1355					
11. 55	33. 25							
12. 28	29. 10							
13. 9	30. 55							
13. 18	30. 20							
13. 23.	29. 15							
13. 37	28. 55							
13. 58	33. 10							
14. 26	32. 40							
14. 51	34. 15							
15. 5	32. 40							
15. 12	31. 55							
15. 26	32. 40							
15. 44	31. 55							
16. 0	33. 50							
16. 42	36. 15							
16. 56	33. 10							
17. 10	32. 50							
17. 25	30. 55							
17. 39	30. 10							
17. 55	31. 25							
18. 28	29. 5							
18. 38	29. 15							
18. 46	28. 50							
19. 17	30. 0							
19. 43	32. 5							
19. 58	31. 0							
20. 23	32. 20							
	***							
20. 51	31. 0							
20. 58	31. 35							
21. 38	32. 5							
21. 53	32. 55							
21. 58	32. 35							
22. 56	34. 55							
23. 37	35. 0							
23. 48	35. 35							
23. 59	35. 35							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Mar. 21		Mar. 21		Mar. 21		Mar. 21		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 35. 35	0. 0	·1355	0. 0	·03058	0. 0	56·8	56·6
0. 5	35. 55	0. 59	·1362	1. 11	·03044	1. 0	56·4	56·5
0. 18	35. 35	1. 10	·1356	1. 44	·03052	2. 0	56·5	56·0
0. 43	37. 5	1. 40	·1368	2. 9	·03043	3. 0	57·8	57·0
1. 8	37. 5	2. 0	·1360	2. 53	·03047	9. 0	57·4	58·0
1. 26	38. 25	2. 51	·1363	4. 54	·03131	21. 0	58·3	59·0
1. 29	38. 25	3. 15	·1367	5. 12	·03136	22. 40	58·3	59·9
1. 35	39. 20	3. 41	·1362	5. 22	·03124	23. 0	58·0	59·5
1. 39	39. 15	4. 8	·1370	5. 40	·03180			
1. 44	38. 0	4. 42	·1372	6. 42	·03122			
2. 44	35. 35	5. 8	·1353	7. 34	·03105			
3. 13	36. 15	5. 15	·1333	9. 57	·03093			
3. 41	34. 0	5. 29	·1380	11. 26	·03108			
3. 56	34. 55	5. 41	·1388	11. 36	·03112			
4. 23	34. 50	6. 10	·1365	11. 53	·03083			
4. 33	34. 20	6. 23	·1368	12. 25	·03059			
5. 8	34. 40	6. 43	·1365	13. 49	·03091			
5. 27	14. 55	6. 57	·1370	14. 56	·03105			
5. 30	16. 25	7. 13	·1367	19. 12	·03119			
5. 33	16. 40	7. 40	·1370	23. 59	·03117			
5. 43	19. 55	8. 10	·1366					
5. 47	19. 55	8. 17	·1369					
5. 54	21. 20	8. 41	·1365					
6. 25	30. 40	9. 15	·1368					
6. 40	33. 25	10. 18	·1363					
6. 56	32. 40	10. 50	·1366					
7. 7	33. 25	11. 23	·1363					
7. 17	33. 0	11. 41	·1378					
7. 28	33. 20	11. 50	·1374					
7. 43	32. 45	12. 10	·1386					
8. 24	32. 20	12. 36	·1374					
8. 52	32. 35	12. 58	·1361					
10. 26	32. 0	13. 11	·1363					
10. 41	31. 35	13. 40	·1357					
11. 14	31. 20	15. 0	·1362					
11. 26	32. 35	15. 50	·1360					
11. 41	40. 55	16. 55	·1362					
11. 55	36. 20	17. 39	·1359					
12. 19	35. 40	17. 49	·1363					
12. 30	31. 45	17. 55	·1359					
12. 53	31. 0	18. 22	·1364					
	***	18. 42	·1360					
13. 37	29. 45	19. 11	·1359					
14. 9	30. 40	19. 41	·1351					
14. 43	30. 20	21. 29	·1353					
14. 50	31. 10	22. 18	·1354					
15. 8	30. 5	23. 49	·1350					
15. 41	30. 30		(†)					
16. 9	30. 15							
16. 29	30. 40							
16. 56	30. 25							
17. 21	31. 10							
17. 51	30. 40							
18. 21	31. 35							
18. 47	30. 45							
19. 19	30. 45							
20. 17	32. 10							
20. 56	31. 15							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.21								
h m	° ′ ″	h m		h m		h m	°	°
21. 8	20. 31. 55							
21. 23	31. 20							
21. 54	31. 55							
22. 19	33. 10							
23. 8	34. 35							
23. 35	34. 45							
	(†)							
Mar.22		Mar.22		Mar.22		Mar.22		
	(†)	1. 0	·1353*	0. 0	·03117	0. 0	59·0	59·5
1. 0	20. 37. 39*	3. 0	·1366*	0. 53	{·03117	1. 0	58·8	58·5
3. 0	34. 32*	9. 0	·1374*		·03270	2. 0	58·5	59·2
9. 0	25. 9*	21. 0	·1342*	8. 0	·03272	3. 0	58·5	58·5
21. 0	29. 57*			8. 26	·03262	9. 0	58·5	58·5
23. 50	38. 45			10. 13	·03257	21. 0	58·9	59·9
23. 55	38. 30			13. 21	·03273			
23. 57	37. 30			14. 36	·03278			
23. 59	37. 30			15. 14	·03253			
				15. 45	·03243			
				16. 24	·03257			
				19. 9	·03262			
				21. 10	·03243			
				21. 50	·03257			
				22. 48	·03252			
				23. 59	·03264			
Mar.23		Mar.23		Mar.23		Mar.23		
0. 0	20. 37. 30	0. 0	·1351	0. 0	·03264	1. 0	59·6	60·6
0. 26	38. 15	0. 11	·1345	1. 55	·03320	3. 0	59·4	60·0
0. 57	43. 25	0. 43	·1356	2. 12	·03312	9. 0	57·9	57·6
1. 1	42. 55	1. 16	·1343	2. 26	·03318	21. 0	57·8	57·5
1. 26	43. 35	1. 40	·1346	2. 40	·03312			
1. 37	43. 20	1. 47	·1357	3. 6	·03323			
1. 42	44. 45	2. 6	·1360	3. 30	·03314			
2. 6	42. 55	2. 14	·1346	4. 20	·03337			
2. 9	41. 30	2. 29	·1348	4. 33	·03332			
2. 26	41. 55	2. 42	·1341	4. 54	·03376			
2. 40	38. 10	3. 0	·1353	4. 59	·03370			
2. 49:	38. 45	3. 10	·1353	5. 23	·03407			
2. 58	37. 25	3. 22	·1365	6. 42	·03323			
3. 7	37. 0	3. 41	·1360	10. 8	·03264			
3. 11	37. 25	3. 54	·1365	10. 54	·03236			
3. 26	36. 30	4. 12	·1377	11. 26	·03233			
3. 41	35. 40	4. 25	·1385	11. 58	·03198			
3. 57	37. 5	4. 50	·1359	12. 29	·03203			
4. 5	37. 0	5. 9	·1331	14. 19	·031[illegible]7			
4. 19	38. 10	5. 41	·1354	19. 24	·03185			
4. 22	37. 55	5. 54	·1350	22. 54	·03157			
4. 35	39. 30	6. 10	·1360	23. 59	·03163			
4. 51	33. 30	6. 35	·1371					
4. 57	28. 10	6. 45	·1366					
5. 12	22. 20	6. 55	·1369					
5. 16	22. 30	7. 11	·1361					
5. 27	26. 0	7. 38	·1359					
5. 34	26. 30	8. 11	·1364					
5. 44	30. 40	8. 44	·1360					
5. 56	29. 35	9. 20	·1367					
6. 8	31. 0	9. 32	·1364					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.23		Mar.23						
h m	° ′ ″	h m		h m		h m	°	°
6. 18	20. 31. 20	10. 12	·1369					
6. 29	31. 5	10. 26	·1376					
6. 35	31. 45	10. 47	·1376					
7. 16	29. 10	11. 11	·1366					
7. 25	29. 5	11. 26	·1365					
7. 49	26. 10	11. 50	·1383					
8. 29	31. 45	12. 25	·1362					
8. 44	31. 55	14. 18	1368					
8. 56	30. 50	14. 59	·1360					
9. 9	30. 55	15. 12	·1364					
9. 16	31. 35	17. 24	·1373					
9. 38	31. 25	18. 18	·1375					
9. 49	30. 20	18. 30	·1371					
10. 3	32. 5	19. 45	·1365					
10. 18	30. 40	20. 10	·1367					
10. 25	31. 5	22. 12	·1359					
10. 39	30. 5	23. 59	·1364					
10. 43	30. 5							
10. 56	29. 50							
11. 6	30. 10							
11. 12	29. 30							
11. 52	32. 30							
12. 11	28. 40							
12. 26	28. 50							
12. 34	29. 55							
12. 44	29. 45							
12. 56	30. 10							
13. 9	29. 50							
13. 38	29. 40							
13. 45	31. 10							
13. 53	31. 0							
14. 17	29. 45							
14. 39	29. 45							
14. 46	31. 10							
15. 12	32. 0							
15. 23	31. 25							
15. 39	30. 45							
16. 10	33. 20							
16. 42	31. 45							
17. 6	30. 40							
17. 24	31. 0							
18. 54	28. 20							
18. 59	28. 25							
19. 43	26. 45							
19. 58	27. 10							
20. 28	26. 40							
21. 30	28. 35							
22. 26	32. 5							
23. 59	35. 55							
Mar.24		Mar.24		Mar.24		Mar.24		
0. 0	20. 35. 55	0. 0	·1364	0. 0	·03163	1. 0	57·8	57·4
0. 14	37. 0	0. 33	·1367	4. 33	·03260	3. 0	58·3	59·0
0. 26	36. 40	1. 20	·1366	4. 53	·03277	9. 0	59·0	60·0
0. 33	37. 0	2. 21	·1371	5. 13	·03262	21. 12	59·8	60·4
1. 19	36. 50	2. 27	·1368	5. 36	·03278			
1. 33	37. 15	2. 43	·1372	6. 3	·03273			
1. 56	36. 55	2. 56	·1367	6. 27	·03277			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

March 22. The Declination and Horizontal Force photographic traces were lost, through the zinc case which covers the cylinder not having been placed in its proper position.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Mar.24		Mar.24		Mar.24				
h m	° ′ ″	h m		h m		h m	°	°
2. 12	20. 37. 0	3. 19	·1370	6. 42	·03266			
2. 23	36. 30	3. 43	·1364	6. 56	·03287			
2. 34	37. 10	4. 33	·1373	7. 25	·03277			
2. 51	36. 25	4. 41	·1365	10. 54	·03289			
3. 9	37. 0	4. 59	·1371	11. 4	·03299			
3. 39	34. 20	5. 20	·1357	11. 27	·03263			
3. 44	34. 50	5. 43	·1378	13. 26	·03272			
4. 13	33. 20	5. 59	·1379	14. 9	·03284			
4. 28	33. 20	6. 11	·1375	14. 34	·03276			
4. 36	32. 15	6. 21	·1378	15. 39	·03297			
4. 43	32. 15	6. 40	·1375	16. 10	·03288			
4. 54	33. 0	6. 48	·1364	17. 29	·03309			
5. 1	32. 0	7. 9	·1385	19. 11	·03317			
5. 23	24. 30	7. 12	·1380	22. 26	·03259			
5. 33	27. 15	7. 20	·1383	23. 59	·03264			
5. 59	31. 25	7. 28	·1374					
6. 12	32. 0	7. 41	·1378					
6. 34	31. 10	7. 59	·1370					
6. 55	21. 20	8. 14	·1366					
7. 3	24. 25	9. 10	·1366					
7. 13	24. 10	9. 26	·1364					
7. 19	26. 20	9. 58	·1368					
7. 29	25. 5	10. 32	·1365					
7. 46	29. 20	10. 55	·1370					
7. 58	29. 40	11. 10	·1370					
8. 4	31. 10	11. 19	·1383					
8. 16	31. 30	11. 27	·1390					
8. 39	29. 50	11. 43	·1384					
8. 53	30. 35	12. 10	·1380					
9. 33	30. 25	12. 34	·1369					
10. 11	29. 55	13. 10	·1370					
10. 23	30. 25	14. 11	·1361					
10. 39	30. 30	14. 26	·1365					
10. 54	30. 20	14. 53	·1367					
11. 11	33. 55	15. 35	·1359					
11. 36	27. 5	16. 13	·1371					
11. 43	26. 50	17. 24	·1364					
12. 12	29. 15	18. 6	·1367					
12. 43	28. 55	19. 41	·1362					
12. 58	27. 30	21. 18	·1354					
	***	22. 12	·1358					
13. 42	27. 20	23. 59	·1367					
14. 1	32. 10							
14. 8	32. 25							
14. 15	34. 20							
14. 42	31. 35							
14. 57	31. 30							
15. 44	33. 0							
15. 54	32. 30							
16. 19	28. 20							
16. 53	27. 40							
17. 33	28. 0							
17. 55	27. 0							
19. 4	26. 55							
19. 16	27. 15							
19. 54:	26. 50							
20. 53	28. 25							
21. 15	28. 50							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Mar.24								
h m	° ′ ″	h m		h m		h m	°	°
21. 51	20. 31. 55							
22. 16	31. 35							
22. 40	33. 5							
22. 50	32. 55							
23. 14	34. 15							
23. 20	34. 15							
23. 59	36. 0							
Mar.25		Mar.25		Mar.25		Mar.25		
0. 0	20. 36. 0	0. 0	·1367	0. 0	·03264	0. 0	59·2	59·0
1. 26	37. 30	2. 42	·1374	1. 32	·03260	9. 0	60·8	62·3
1. 34	38. 15	3. 12	·1371	3. 24	·03294	21. 0	58·9	58·5
1. 39	37. 35	4. 52	·1378	4. 26	·03322			
1. 44	37. 25	5. 40	·1379	6. 13	·03353			
1. 59	37. 40	5. 52	·1376	9. 11	·03383			
3. 8	35. 25	7. 9	·1378	10. 12	·03376			
3. 17	35. 30	7. 26	·1374	10. 28	·03379			
4. 23	32. 50	7. 45	·1378	12. 41	·03358			
5. 7	31. 50	9. 0	·1373	13. 22	·03340			
6. 36	31. 0	9. 22	·1381	17. 40	·03305			
7. 51	31. 10	9. 36	·1376	19. 27	·03302			
8. 42	30. 40	9. 51	·1384	20. 59	·03277			
9. 12:	27. 55	10. 20	·1370	23. 59	·03272			
10. 1	30. 15	10. 39	·1375					
10. 17	29. 45	10. 43	·1374					
10. 41	30. 50	10. 55	·1378					
11. 3	29. 45	11. 14	·1372					
11. 16	29. 45	11. 51	·1374					
11. 26	30. 15	12. 12	·1378					
12. 3	29. 25	12. 35	·1374					
12. 29	29. 20	12. 55	·1382					
12. 50	31. 35	13. 10	·1379					
12. 56	31. 5	13. 54	·1370					
13. 1	31. 10	17. 29	·1373					
13. 14	29. 40	20. 14	·1367					
13. 29	28. 45	21. 21	·1363					
14. 9	29. 50	22. 21	·1362					
14. 16	29. 30	23. 59	·1367					
14. 53	29. 55							
	***							
15. 2	29. 5							
15. 39	29. 30							
18. 2	28. 45							
18. 45	27. 25							
18. 59	27. 30							
19. 13	26. 45							
19. 19	26. 50							
19. 26	26. 5							
19. 30	26. 50							
20. 26	26. 30							
21. 6	27. 30							
23. 59	35. 25							
Mar.26		Mar.26		Mar.26		Mar.26		
0. 0	20. 35. 25	0. 0	·1367	0. 0	·03272	1. 0	59·9	61·2
0. 53	35. 25	0. 19	·1368	1. 52	·03317	3. 0	60·2	60·8
1. 0	34. 55	0. 53	·1372	3. 44	·03343	9. 0	59·8	59·7
1. 32	35. 20	1. 0	·1368	10. 12	·03318	21. 0	59·7	59·6

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 26		Mar. 26		Mar. 26				
h m	° ′ ″	h m		h m		h m	°	°
2. 22	20. 34. 5	1. 12	·1372	11. 9	·03287			
2. 41	34. 5	2. 19	·1372	11. 54	·03284			
4. 12	31. 40	2. 57	·1376	15. 4	·03298			
4. 53	31. 15	4. 20	·1374	19. 10	·03309			
8. 0	30. 50	7. 10	·1380	21. 4	·03280			
9. 37	30. 55	7. 39	·1379	23. 59	·03267			
9. 53	29. 35	7. 55	·1381					
9. 58	29. 35	8. 42	·1378					
10. 32	25. 35	9. 34	·1379					
10. 47	25. 40	9. 52	·1391					
11. 8:	25. 0	10. 0	·1381					
11. 29	27. 45	10. 20	·1391					
11. 39	27. 30	10. 55	·1399					
11. 51	27. 45	11. 37	·1382					
12. 8	26. 20	12. 0	·1375					
12. 26	26. 30	12. 25	·1379					
12. 40	31. 5	12. 41	·1375					
13. 9	31. 20	13. 0	·1375					
13. 57	29. 20	13. 23	·1379					
14. 39	29. 30	14. 27	·1376					
15. 55	27. 55	17. 11	·1378					
15. 59	28. 30	17. 42	·1376					
16. 25	27. 50	17. 54	·1380					
16. 43	28. 0	18. 37	·1376					
17. 7	27. 45	19. 3	·1377					
17. 26	28. 15	19. 43	·1371					
17. 44	28. 20	20. 22	·1372					
18. 10	27. 30	21. 22	·1364					
18. 15	28. 5	21. 59	·1366					
18. 26	27. 25	22. 13	·1362					
18. 29	27. 25	22. 25	·1364					
18. 58	26. 45	22. 44	·1362					
19. 3	26. 45	23. 15	·1364					
19. 12	25. 55	23. 39	·1371					
	***	23. 59	·1367					
19. 41	28. 10							
19. 54	27. 10							
20. 0	27. 35							
20. 8	26. 55							
20. 16	27. 10							
20. 30	26. 50							
20. 36	28. 0							
20. 53	26. 50							
21. 9	30. 0							
21. 20	29. 15							
21. 34	30. 0							
22. 0	32. 45							
22. 13	32. 20							
22. 28	33. 40							
23. 10	35. 25							
23. 36	39. 10							
23. 55	40. 20							
23. 59	40. 20							
Mar. 27		Mar. 27		Mar. 27		Mar. 27		
0. 0	20. 40. 20	0. 0	·1367	0. 0	·03267	1. 0	60·2	60·1
0. 28	38. 50	0. 36	·1364	0. 41	·03277	3. 0	60·2	62·0
1. 14	40. 35	0. 42	·1366	1. 36	·03280	9. 0	59·4	60·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 27		Mar. 27		Mar. 27		Mar. 27		
h m	° ′ ″	h m		h m		h m	°	°
1. 54	20. 38. 30	0. 51	·1362	1. 56	·03292	21. 0	58·8	59·0
2. 13	42. 15	1. 21	·1368	2. 21	·03322	22. 0	59·0	59·5
2. 24	41. 45	1. 56	·1371	2. 40	·03327	23. 0	59·3	59·7
2. 30	41. 45	2. 20	·1390	2. 56	·03308			
2. 51	38. 0	2. 41	·1386	3. 52	·03338			
3. 14	37. 0	3. 0	·1365	4. 4	·03335			
3. 21	37. 5	3. 56	·1380	4. 12	·03351			
3. 41	35. 35	4. 9	·1375	4. 41	·03360			
4. 0	34. 25	4. 21	·1388	5. 43	·03369			
4. 9	35. 10	4. 40	·1387	6. 45	·03353			
4. 24	34. 30	4. 55	·1374	7. 10	·03356			
4. 29	34. 30	5. 9	·1377	8. 52	·03337			
4. 41	33. 20	5. 35	·1367	11. 9	·03318			
4. 44	33. 20	5. 44	·1373	11. 34	·03336			
4. 55	33. 35	6. 15	·1368	12. 0	·03278			
5. 13	32. 40	6. 40	·1370	12. 26	·03297			
5. 39	30. 30	7. 12	·1369	13. 6	·03272			
6. 26	31. 40	8. 11	·1379	13. 27	·03266			
6. 56	29. 20	8. 43	·1378	14. 21	·03286			
7. 0	29. 35	8. 54	·1380	15. 43	·03285			
7. 24:	27. 40	9. 33	·1382	16. 22	·03264			
7. 34	28. 5	9. 55	·1379	16. 43	·03268			
7. 45	27. 45	10. 9	·1381	17. 42	·03257			
8. 11	29. 40	10. 26	·1376	18. 42	·03263			
8. 23	28. 55	10. 55	·1379	19. 42	·03257			
8. 34	29. 0	11. 37	·1370	21. 34	·03260			
9. 0	26. 55	11. 43	·1378	23. 59	·03246			
9. 29	28. 45	11. 58	·1385					
9. 48	27. 30	12. 6	·1381					
	***	12. 41	·1397					
10. 29	29. 25	13. 0	·1393					
10. 43	30. 10	13. 51	·1370					
11. 14	28. 25	14. 12	·1365					
11. 33	37. 15	15. 12	·1374					
11. 41	35. 15	15. 25	·1372					
12. 5	23. 10	15. 53	·1375					
12. 14	22. 10	16. 29	·1354					
12. 39:	27. 55	16. 52	·1368					
12. 57	25. 50	17. 26	·1383					
13. 30	23. 30	18. 0	·1376					
13. 40	23. 40	18. 59	·1379					
14. 12	30. 25	19. 12	·1375					
14. 23	30. 20	19. 18	·1379					
15. 3	30. 20	19. 55	·1368					
15. 11	30. 0	20. 23	·1356					
15. 25	30. 0	20. 50	·1353					
15. 43	31. 45	21. 12	·1356					
15. 55	31. 35	21. 41	·1366					
16. 6	29. 50	22. 28	·1363					
16. 27	29. 50	23. 59	·1369					
16. 49	33. 5							
17. 6	32. 10							
17. 23	32. 40							
17. 41	29. 40							
17. 47	30. 20							
18. 1	28. 50							
18. 12	28. 15							
18. 15	26. 55							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 27								
h m	° ′ ″	h m		h m		h m	°	°
18.23	20.28. 0							
18.54	27. 5							
19. 6	26.20							
19.12	27.25							
19.19	26.30							
19.27	27.20							
19.33	26.50							
19.48	29.15							
20.26	28.55							
20.35	30. 5							
21.30	29.40							
21.56	30.50							
22. 5	30.40							
23.41	35.20							
23.50	36.35							
23.59	36.35							
Mar. 28		Mar. 28		Mar. 28		Mar. 28		
0. 0	20.36.35	0. 0	·1369	0. 0	·03246	0. 0	59·3	59·0
0.21	38. 0	0.25	·1376	2.19	·03280	1. 0	59·8	60·2
0.26	38. 0	0.40	·1379	5.57	·03320	2. 0	59·5	59·9
0.32	38.50	0.50	·1375	7.29	·03334	3. 0	59·5	60·0
0.53	38. 0	1.55	·1380	7.53	·03348	9. 0	59·9	60·9
1.41	37. 5	2.14	·1378	8. 9	·03346	21. 0	60·6	61·0
3.32	32.10	2.26	·1381	8.22	·03336	22. 0	60·2	60·5
5. 9	30.20	4.38	·1375	8.41	·03323	23. 0	59·9	60·0
6.10	30.40	5.18	·1378	8.58	·03344			
6.24	30.20	6.10	·1369	9.30	·03336			
7.11	30.20	6.27	·1377	10.43	·03340			
7.16	28.50	7.11	·1373	11.52	·03316			
7.22	28.15	7.40	·1354	12.41	·03318			
7.43	20.10	7.52	·1373	13.40	·03337			
7.55	21.55	8.11	·1400	21.28	·03356			
8. 1	17.50	8.25	·1388	23.59	·03336			
8.12	21.55	8.43	·1369					
8.17	21.10	9.10	·1377					
8.29	22. 5	9.25	·1372					
8.42	21.35	9.44	·1376					
9.14	31. 0	10.14	·1374					
9.26	30.40	10.41	·1375					
9.39	31.10	10.56	·1379					
10. 0	30.10	11.11	·1383					
10.39	30.35	11.24	·1378					
10.53	32.55	11.44	·1381					
11. 0	32.20	12.20	·1375					
11. 9	33. 5	12.36	·1378					
11.16	32. 0	12.58	·1373					
11.26	33.20	14.55	·1367					
11.40	34.30	15.11	·1371					
11.54	32.40	15.51	·1371					
12. 7	33. 0	16.14	·1376					
12.39	31.25	17.14	·1368					
12.56	30.10	18. 0	·1375					
13.29	30.40	18.30	·1375					
13.54	29.40	19.41	·1365					
14. 7	29.50	20. 0	·1360					
14.13	29.20	21.43	·1356					
14.31	29.40	23.59	·1361					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar. 28								
h m	° ′ ″	h m		h m		h m	°	°
14.36	20.31.10							
14.44	31.50							
15.14	30.20							
15.27	30.20							
15.49	30.40							
16.10	29.40							
16.23	29.20							
16.38	29.45							
16.58	31. 5							
17. 8	31. 5							
17.12	32.10							
17.22	31.15							
17.48	30.20							
17.56	30.55							
18.55	28. 0							
19.10	28. 0							
19.26	26.50							
19.39	27.10							
20.13	26.25							
20.28	27.30							
20.42	26.50							
20.46	28. 0							
21. 0	27.50							
21. 8	28.25							
21.29	28. 5							
21.36	29.30							
22.23	31. 5							
22.59	33.45							
23.11	33.35							
23.53	35.35							
23.59	35.25							
Mar. 29		Mar. 29		Mar. 29		Mar. 29		
0. 0	20.35.25	0. 0	·1362	0. 0	·03336	0. 0	60·1	60·3
0. 9	34.55	0.12	·1365	2.57	·03346	1. 0	59·9	61·0
0.25	36.35	0.25	·1371	5.24	·03327	2. 0	59·9	60·7
0.37	35.55	0.40	·1367	10.19	·03338	3. 0	59·8	59·9
0.50	36.30	0.54	·1370	14. 9	·03309	9. 0	60·2	61·8
5.13	30.25	2.21	·1368	14.12	·03325	21.30	59·0	59·5
5.39	29.45	2.41	·1374	14.20	·03303			
5.45	30. 0	3.35	·1376	17.12	·03290			
6. 5	29.20	4.14	·1377	19.11	·03283			
6.26	30. 0	4.25	·1381	21.28	·03248			
6.39	30. 0	5.40	·1375	21.56	·03260			
7. 4	29.20	5.55	·1378	23. 0	·03217			
7.25	30. 0	6.52	·1374	23.36	·03234			
7.43	29.40	7.12	·1377	23.43	·03228			
8.19	31.15	7.38	·1375	23.59	·03229			
8.40	31.10	8. 0	·1377					
8.58	30.20	8.14	·1381					
12.14	31. 5	8.51	·1375					
13.59	30.25	9.18	·1378					
14. 0	32.55	9.29	·1377					
14.13	30.40	9.55	·1378					
14.30	29.20	10.20	·1376					
14.38	29.30	14.12	·1377					
14.52	28.55	14.16	·1397					
15.16	29. 0	14.29	·1388					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.29		Mar.29						
h m	° ′ ″	h m		h m		h m	°	°
15.26	20.29.55	14.45	·1389					
15.47	29.20	15.10	·1385					
15.58	28.25	15.17	·1390					
16.57	29.10	15.26	·1386					
17.13	28.25	15.41	·1390					
17.27	28.30	15.56	·1390					
17.59	27.25	16.36	·1384					
18.7	27.30	17.41	·1384					
	***	20.11	·1374					
18.54	26.15	21.4	·1367					
19.53	25.40	21.24	·1368					
19.59	24.30	21.52	·1360					
20.14	26.15	22.10	·1366					
	***	22.27	·1359					
20.50	27.0	23.9	·1368					
21.4	26.40	23.59	·1359					
21.27	29.10							
21.41	29.30							
22.0	30.35							
22.22	30.35							
22.56	33.45							
23.19	34.15							
23.27	33.50							
23.41	36.45							
23.50	36.5							
23.59	34.30							
Mar.30		Mar.30		Mar.30		Mar.30		
0.0	20.34.30	0.0	·1359	0.0	·03229	0.30	59·2	59·8
0.9	34.15	0.47	·1367	0.56	·03238	8.0	58·8	59·0
1.0	35.25	2.25	·1378	2.34	·03264	21.0	59·3	60·0
1.8	35.0	3.7	·1380	3.12	·03268			
1.35	35.0	3.14	·1376	3.16	·03277			
2.32	33.45	3.25	·1392	3.34	·03272			
2.41	33.55	3.41	·1390	3.38	·03261			
2.53	33.25	3.43	·1376	3.41	·03278			
3.12	32.40	3.48	·1389	4.46	·03268			
3.16	32.40	3.56	·1379	6.49	·03275			
3.23	34.25	4.20	·1384	7.20	·03291			
3.33	33.40	4.41	·1380	8.9	·03278			
3.41	32.0	4.48	·1386	11.25	·03284			
3.42	33.15	4.56	·1382	14.35	·03296			
3.50	32.20	5.19	·1387	17.36	·03283			
4.9	32.20	5.33	·1382	19.20	·03281			
4.26	32.10	6.9	·1377	21.41	·03262			
4.32	31.35	6.14	·1380	23.59	·03220			
4.42	32.5	6.40	·1376					
4.59	31.55	6.45	·1369					
5.4	32.50	6.56	·1373					
5.9	31.20	7.12	·1383					
5.21	31.55	7.15	·1378					
5.45	30.20	7.25	·1382					
5.57	30.50	8.25	·1380					
6.11	30.45	8.51	·1375					
6.17	28.55	9.39	·1381					
6.28	28.55	9.57	·1377					
6.31	30.0	10.43	·1374					
6.44	27.10	10.57	·1376					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.30		Mar.30						
h m	° ′ ″	h m		h m		h m	°	°
6.48	20.27.5	11.20	·1375					
6.57	22.55	11.42	·1384					
7.0	22.55	11.58	·1379					
7.13	24.20	13.12	·1376					
7.29	29.55	16.11	·1375					
7.42	30.40	16.28	·1377					
8.31	30.35	19.11	·1373					
8.42	31.10	21.12	·1359					
9.15	28.55	21.42	·1362					
9.18	28.55	22.26	·1352					
9.31	29.40	22.45	·1354					
9.53	29.30	23.11	·1360					
10.9	30.15	23.42	·1364					
11.31	31.5	23.59	·1356					
12.15	30.10							
13.11	30.40							
14.54	30.20							
15.55	29.30							
16.11	29.40							
16.13	30.5							
17.33	28.45							
17.45	28.55							
18.30	27.40							
19.45	25.25							
	***							
20.57	26.55							
22.21	31.30							
22.26	32.45							
22.38	32.10							
22.51	34.30							
22.56	33.55							
	***							
23.51	38.5							
23.56	37.0							
23.59	37.30							
Mar.31		Mar.31		Mar.31		Mar.31		
0.0	20.37.30	0.0	·1356	0.0	·03220	1.0	59·8	60·0
0.19	36.55	0.18	·1362	1.26	·03257	3.0	58·9	59·4
0.27	38.5	0.31	·1368	2.27	·03277	9.0	58·8	58·9
0.48	37.10	0.48	·1367	4.57	·03302	22.0	58·6	58·0
0.59	37.10	1.23	·1376	6.22	·03306			
1.19	38.10	1.29	·1373	7.11	·03298			
1.58	38.50	2.12	·1378	7.36	·03302			
3.12	37.55	2.41	·1373	9.14	·03284			
3.26	36.35	4.12	·1371	9.54	·03267			
3.39	37.20	4.19	·1365	10.36	·03272			
4.18	34.40	4.28	·1369	11.26	·03224			
4.27	32.40	4.36	·1366	11.54	·03256			
4.38	32.40	5.14	·1376	12.25	·03243			
5.8	30.50	5.43	·1370	13.10	·03223			
5.25	31.35	5.57	·1372	13.57	·03230			
5.56	31.20	6.11	·1368	14.14	·03223			
6.3	31.45	6.26	·1369	15.49	·03236			
6.12	31.0	6.41	·1372	19.11	·03238			
6.21	31.10	6.56	·1367	20.55	·03211			
6.31	30.20	7.14	·1363	21.12	·03216			
6.41	31.50	7.28	·1367	23.11	·03193			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.31		Mar.31		Mar.31				
h m	° ′ ″	h m		h m		h m	°	°
6.52	20.31.40	7.47	·1367	23.59	·03210			
7.9	29.5	8.14	·1362					
7.39	29.5	9.18	·1367					
7.49	28.5	9.29	·1369					
8.2	29.10	9.45	·1372					
8.25:	27.30	10.11	·1364					
8.44	28.15	10.30	·1361					
8.57	28.10	10.45	·1365					
9.10	28.30	10.57	·1373					
9.19	27.40	11.25	·1369					
9.28	27.45	11.41	·1357					
9.41	24.10	12.12	·1367					
9.59	22.30	12.40	·1383					
10.8	22.50	12.56	·1383					
10.14	22.5	13.14	·1375					
11.2	30.50	14.0	·1368					
11.9	30.45	14.41	·1374					
11.25	27.20	14.55	·1368					
11.36	22.20	15.26	·1369					
11.43	22.0	16.26	·1378					
11.56	26.5	17.12	·1373					
12.23	24.55	18.33	·1377					
12.27	25.45	18.57	·1372					
12.39	25.30	20.9	·1351					
13.24	27.20	20.55	·1322					
13.36	27.10	21.12	·1332					
13.45	29.55	21.54	·1345					
13.51	29.55	22.22	·1354					
14.7	28.50	23.12	·1352					
14.12	29.30	23.21	·1356					
14.25	29.5	23.26	·1354					
14.31	30.30	23.49	·1362					
14.54	31.50	23.59	·1350					
14.59	31.40							
15.8	30.40							
15.23	30.55							
15.28	29.45							
15.59	29.45							
16.11	28.0							
16.15	28.0							
16.29	27.25							
16.50	28.30							
17.38	27.50							
17.56	26.0							
18.14	26.0							
18.19	26.55							
18.27	26.0							
18.38	25.20							
18.45	27.10							
19.7	27.10							
19.26	24.55							
19.38	26.40							
19.46	26.20							
20.12	26.55							
20.19	28.40							
20.27	28.10							
20.38	30.5							
21.19	32.30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Mar.31								
h m	° ′ ″	h m		h m		h m	°	°
21.59	20.33.30							
22.11	33.0							
22.26	33.15							
22.38	32.50							
22.50	33.20							
23.14	39.10							
23.22	39.0							
23.27	39.30							
23.31	39.30							
23.38	38.55							
23.45	40.30							
23.55	41.10							
23.59	41.0							
Apr. 1		Apr. 1		Apr. 1		Apr. 1		
0.0	20.41.0	0.0	·1350	0.0	·03210	1.0	59·5	59·0
0.14	42.5	0.12	·1341	0.9	·03210	9.0	59·6	59·5
0.49	39.50	0.33	·1340	0.19	·03227	21.0	58·3	58·0
0.58	39.55	0.45	·1345	1.11	·03266			
1.10	42.0	1.9	·1361	1.42	·03263			
1.22	41.25	1.14	·1372	2.8	·03274			
1.53	43.20	2.11	·1374	2.14	·03265			
2.3	44.55	2.15	·1366	2.23	·03277			
2.11	43.10	2.25	·1368	2.41	·03278			
2.23	44.40	2.40	·1361	2.55	·03272			
2.33	43.50	2.43	·1365	3.26	·03289			
2.40	44.35	3.0	·1353	3.53	·03276			
2.53	42.45	3.18	·1360	5.7	·03280			
3.14	41.50	3.27	·1370	5.40	·03286			
3.26	42.55	3.51	·1361	6.55	·03302			
3.58	39.50	4.12	·1367	7.12	·03319			
4.24	37.45	4.25	·1365	7.25	·03320			
5.9	35.40	4.42	·1372	7.34	·03296			
5.19	35.55	5.4	·1370	7.42	·03299			
5.40	33.45	5.21	·1379	8.9	·03272			
5.51	34.20	5.41	·1365	8.24	·03263			
6.7	33.10	6.30	·1373	8.56	·03280			
6.11	33.20	6.43	·1368	9.23	·03282			
6.24	32.40	6.54	·1358	9.51	·03277			
6.39	32.40	7.10	·1365	10.7	·03244			
6.54	30.20	7.26	·1383	10.11	·03240			
7.1	27.0	7.41	·1410	10.25	·03196			
7.13	27.0	7.53	·1402	10.58	·03222			
7.30	29.50	8.11	·1383	11.59	·03205			
7.39	17.55	8.20	·1368	12.12	·03212			
7.47	23.10	8.32	·1371	12.52	·03183			
8.2	28.40	8.45	·1359	13.41	·03213			
8.10	28.10	8.55	·1363	13.58	·03200			
8.14	28.45	9.22	·1368	14.42	·03216			
8.20	28.30	9.55	·1396	15.12	·03181			
8.29	26.45	10.18	·1359	15.39	·03162			
8.46	29.50	10.27	·1336	16.49	·03183			
8.58	28.10	10.40	·1355	17.54	·03215			
9.22	28.20	10.50	·1352	21.32	·03202			
9.40	23.15	11.12	·1368	23.59	·03219			
9.45	24.15	11.19	·1364					
9.54	23.25	11.33	·1369					
9.59	27.30	11.41	·1364					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 1		Apr. 1						
h m	° ′ ″	h m		h m		h m	°	°
10. 4	20. 28. 40	11. 45	·1368					
10. 15	33. 40	12. 6	·1356					
10. 27	34. 20	12. 34	·1376					
10. 37	24. 0	13. 0	·1361					
10. 42	22. 20	13. 49	·1376					
10. 50	23. 45	14. 39	·1364					
11. 8	22. 55	15. 10	·1391					
11. 13	24. 30	15. 27	·1382					
11. 22	23. 55	15. 47	·1380					
11. 28	26. 0	15. 57	·1374					
11. 40	21. 50	16. 27	·1367					
11. 45	21. 30	17. 22	·1344					
11. 56	18. 50	17. 51	·1353					
12. 12	23. 10	18. 7	·1352					
12. 38	32. 5	18. 24	·1360					
12. 50	30. 0	18. 53	·1357					
12. 57	28. 10	19. 18	·1362					
13. 3	28. 20	19. 40	·1357					
13. 12	27. 20	19. 55	·1358					
13. 16	28. 15	21. 26	·1353					
13. 26	27. 50	23. 59	·1362					
13. 29	28. 5							
13. 54	23. 40							
14. 1	24. 0							
14. 9	23. 20							
14. 29	31. 55							
14. 40	33. 45							
14. 50	32. 40							
15. 32	20. 50							
15. 43	21. 20							
15. 51	20. 55							
16. 9	22. 20							
16. 16	21. 55							
16. 33	24. 10							
16. 43	23. 20							
16. 53	26. 30							
17. 6	28. 0							
17. 13	30. 5							
17. 26	29. 55							
17. 32	30. 40							
17. 46	28. 20							
18. 6	27. 30							
	***							
18. 29	27. 30							
18. 41	26. 25							
19. 8	27. 0							
19. 25	26. 0							
19. 33	27. 0							
20. 9	27. 0							
21. 9	29. 40							
21. 25	29. 30							
21. 56	30. 55							
22. 39	33. 55							
22. 50	33. 40							
23. 20	36. 0							
23. 31	35. 55							
23. 35	37. 40							
23. 59	40. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 2		Apr. 2		Apr. 2		Apr. 2		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 40. 15	0. 0	·1362	0. 0	·03219	1. 0	59 ·3	59 ·1
0. 26	39. 40	0. 11	·1364	0. 37	·03219	3. 0	59 ·5	59 ·6
0. 29	37. 45	0. 25	·1362	2. 44	·03309	9. 0	59 ·2	59 ·0
0. 54	39. 10	0. 41	·1350	3. 11	·03297	21. 0	58 ·7	58 ·8
0. 59	38. 55	1. 10	·1356	3. 41	·03305			
1. 27	40. 45	1. 21	·1367	3. 49	·03329			
2. 9	39. 40	2. 10	·1365	4. 11	·03319			
2. 33	40. 40	2. 28	·1359	4. 24	·03309			
2. 40	40. 15	2. 50	·1361	6. 16	·03266			
2. 48	40. 40	3. 19	·1354	7. 54	·03262			
2. 54	39. 35	3. 43	·1356	8. 20	·03277			
3. 9	37. 20	3. 55	·1369	8. 39	·03268			
3. 33	35. 20	4. 11	·1372	8. 57	·03268 ·03117			
3. 42	31. 30	4. 25	·1365	11. 43	·03108			
3. 53	30. 20	5. 57	·1374	12. 13	·03100			
4. 13	34. 45	6. 27	·1371	12. 44	·03102			
4. 22	34. 25	6. 54	·1376	13. 13	·03083			
4. 36	35. 25	7. 26	·1373	13. 28	·03083			
5. 29	33. 0	7. 41	·1374	14. 7	·03072			
6. 39	31. 20	7. 57	·1364	15. 44	·03070			
6. 59	31. 35	8. 11	·1368	16. 11	·03082			
7. 16	30. 55	8. 25	·1363	17. 21	·03077			
7. 30	31. 40	8. 53	·1391	18. 9	·03080			
7. 43	30. 20	9. 12	·1365	21. 16	·03082			
8. 11	31. 5	9. 26	·1376	23. 59	·03100			
8. 21	29. 30	9. 43	·1365					
8. 30	29. 30	9. 55	·1367					
8. 40	19. 0	10. 15	·1361					
8. 59	22. 0	11. 12	·1366					
9. 1	24. 25	11. 40	·1361					
9. 17	27. 30	11. 54	·1366					
9. 32	33. 15	12. 27	·1364					
9. 54	30. 40	12. 43	·1367					
10. 23	30. 5	13. 21	·1361					
10. 44	32. 0	13. 39	·1366					
10. 57	32. 0	14. 10	·1369					
11. 8	32. 15	14. 39	·1364					
11. 13	32. 15	15. 11	·1376					
11. 31:	31. 10	15. 22	·1372					
11. 56	34. 15	15. 43	·1375					
12. 35	31. 50	15. 56	·1368					
12. 44	31. 15	16. 15	·1367					
12. 58	34. 20	16. 42	·1374					
13. 26	31. 45	17. 12	·1369					
13. 47	34. 0	17. 55	·1349					
13. 59	33. 20	18. 27	·1355					
14. 14	30. 55	19. 27	·1353					
14. 46	33. 30	19. 56	·1347					
15. 9	31. 55	20. 55	·1320					
15. 12	32. 0	21. 41	·1326					
15. 23	30. 30	22. 12	·1336					
15. 27	30. 20	23. 3	·1334					
15. 39	28. 15	23. 30	·1346					
15. 50	29. 45	23. 59	·1350					
15. 59	28. 20							
16. 27	30. 25							
16. 44	29. 40							
16. 57	30. 0							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 2								
h m	° ′ ″	h m		h m		h m	°	°
17. 9	20. 30. 0							
17. 20	31. 30							
17. 56	33. 55							
18. 14	34. 35							
18. 31	34. 40							
18. 42	32. 5							
18. 48	32. 40							
	***							
19. 10	30. 5							
19. 25	30. 5							
19. 39	29. 30							
19. 53	30. 0							
20. 0	31. 30							
20. 4	31. 5							
20. 8	31. 55							
20. 27	32. 30							
20. 41	34. 35							
20. 57	34. 5							
21. 25	36. 30							
21. 38	38. 5							
22. 1	38. 35							
22. 17	35. 45							
22. 26	36. 15							
22. 34	35. 25							
	***							
23. 41	39. 15							
23. 50	39. 55							
23. 59	39. 55							
Apr. 3		Apr. 3		Apr. 3		Apr. 3		
0. 0	20. 39. 55	0. 0	·1350	0. 0	·03100	1. 0	59 ·8	60 ·0
0. 8	40. 0	0. 29	·1356	1. 43	·03142	3. 0	59 ·8	60 ·2
0. 13	39. 20	1. 4	·1352	1. 55	·03134	9. 0	58 ·8	59 ·0
0. 16	40. 20	1. 41	·1361	2. 55	·03157	21. 0	57 ·9	58 ·5
0. 29	40. 30	1. 55	·1361	3. 25	·03154	22. 0	58 ·1	59 ·0
1. 26	39. 15	2. 27	·1368	3. 53	·03172	23. 0	58 ·0	58 ·5
1. 33	40. 10	2. 50	·1363	4. 55	·03174			
1. 55	38. 30	3. 5	·1368	5. 11	·03154			
2. 28	39. 0	3. 21	·1362	5. 41	·03180			
2. 38	38. 20	3. 33	·1354	7. 0	·03137			
2. 53	38. 50	4. 12	·1379	9. 46	·03104			
2. 59	37. 40	4. 30	·1377	10. 27	·03074			
3. 17	37. 25	4. 44	·1381	10. 52	·03083			
3. 39	32. 45	4. 58	·1377	11. 11	·03077			
4. 0	34. 40	5. 18	·1340	12. 56	·03083			
4. 11	34. 20	5. 43	·1373	13. 45	·03078			
4. 30	35. 20	6. 11	·1375	18. 22	·03082			
4. 53	34. 55	6. 57	·1370	18. 45	·03076			
4. 58	33. 30	7. 12	·1375	19. 40	·03073			
5. 7	33. 0	7. 59	·1370	20. 41	·03052			
5. 23	23. 15	8. 41	·1375	20. 44	·03039			
5. 29	22. 55	9. 5	·1369	21. 10	·03045			
5. 42	26. 20	9. 25	† ·1381	22. 19	·03027			
6. 0	27. 30	9. 43	·1378	23. 6	·03022			
6. 40	32. 40	10. 10	·1389	23. 59	·03040			
7. 8	33. 0	10. 39	·1370					
7. 20	32. 40	10. 56	·1373					
7. 36	33. 25	11. 22	·1364					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 3		Apr. 3						
h m	° ′ ″	h m		h m		h m	°	°
7. 43	20. 33. 5	11. 43	·1369					
8. 8	33. 35	12. 4	·1362					
8. 41	32. 40	12. 41	·1360					
9. 2	32. 50	13. 6	·1365					
9. 21	29. 40	13. 25	·1360					
9. 32	29. 0	13. 40	·1362					
9. 44	31. 50	14. 11	·1352					
10. 3	30. 40	15. 0	·1366					
10. 10	31. 5	15. 57	·1367					
10. 29	26. 55	16. 39	·1375					
10. 55	30. 5	17. 22	·1368					
11. 26	28. 0	17. 42	·1372					
11. 31	28. 55	17. 57	·1367					
11. 45	29. 5	18. 21	·1369					
12. 3	28. 0	19. 20	·1339					
12. 27	30. 5	19. 36	·1343					
12. 37	29. 40	20. 12	·1347					
12. 46	30. 45	20. 26	·1345					
12. 59	30. 55	20. 43	·1349					
13. 19	28. 20	20. 54	·1343					
13. 36	28. 40	21. 13	·1350					
13. 51	32. 30	22. 25	·1342					
13. 57	32. 30	23. 43	·1316					
14. 11	34. 0	23. 51	·1330					
15. 14	30. 50	23. 59	·1334					
15. 28	30. 25							
15. 39	31. 0							
15. 46	29. 50							
	***							
16. 21	29. 40							
16. 29	29. 10							
16. 43	30. 20							
17. 3	29. 20							
17. 14	30. 10							
17. 39	29. 35							
17. 42	28. 55							
17. 57	28. 0							
18. 15	29. 35							
18. 28	28. 40							
18. 39	29. 15							
18. 45	30. 35							
18. 56	30. 35							
19. 9	31. 45							
19. 14	31. 10							
19. 18	32. 5							
19. 39	34. 0							
20. 11	32. 55							
	***							
20. 35	34. 30							
20. 42	31. 25							
20. 59	33. 40							
21. 28	32. 0							
21. 39	33. 25							
21. 48	33. 20							
22. 0	35. 10							
22. 39	36. 30							
23. 0	39. 25							
23. 11	39. 40							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 3								
h m	° ′ ″	h m		h m		h m	°	°
23. 15	20. 41. 25							
23. 24	42. 10							
23. 36	41. 10							
23. 41	42. 35							
23. 44	42. 5							
23. 59	42. 35							
Apr. 4		Apr. 4		Apr. 4		Apr. 4		
0. 0	20. 42. 35	0. 0	·1334	0. 0	·03040	0. 0	59·3	58·1
0. 4	43. 10	0. 11	·1338	1. 10	·03068	1. 0	58·5	59·0
0. 13	40. 40	0. 22	·1346	1. 24	·03060	2. 0	58·5	59·0
0. 23	41. 35	0. 29	·1343	2. 11	·03114	3. 0	58·5	59·0
0. 32	39. 45	1. 2	·1370	2. 25	·03124	9. 0	57·8	57·8
0. 39	40. 40	1. 12	·1360	2. 44	·03106	21. 0	58·2	58·0
0. 41	39. 55	1. 22	·1358	2. 58	·03106	22. 0	58·6	59·3
1. 1	45. 45	1. 33	·1335	4. 4	·03083	23. 0	58·6	59·5
1. 5	43. 55	1. 54	·1336	5. 41	·03082			
1. 19	45. 40	2. 7	·1359	5. 44	·03093			
1. 27	45. 20	2. 26	·1374	6. 0	·03082			
1. 41	40. 55	2. 49	·1363	6. 11	·03096			
1. 43	40. 50	2. 56	·1368	6. 14	·03094			
1. 56	33. 15	3. 14	·1358	6. 57	·03100			
2. 2	35. 0	3. 27	·1368	7. 44	·03096			
2. 10	34. 55	4. 48	·1374	7. 54	·03100			
2. 28	38. 45	5. 7	·1370	8. 22	·03097			
2. 40	37. 20	5. 13	·1373	8. 30	·03103			
2. 47	37. 50	5. 24	·1370	8. 51	·03023			
2. 50	39. 15	5. 39	·1372	9. 26	·03015			
3. 0	38. 50	5. 43	·1377	9. 41	·03037			
3. 10	36. 55	5. 57	·1370	10. 0	·03012			
3. 24	37. 35	6. 11	·1380	10. 18	·03042			
4. 12	35. 25	6. 26	·1368	12. 19	·03062			
	***		***	12. 24	·03057			
6. 6	33. 10	7. 0	·1368	12. 42	·03010			
6. 17	31. 20	7. 20	·1375	12. 56	·02997			
6. 37	31. 25	7. 27	·1369	13. 9	·03016			
6. 45	30. 50	7. 39	·1374	13. 28	·02983			
6. 53	31. 35	7. 40	·1368	13. 54	·03000			
6. 58	31. 35	7. 47	·1376	14. 4	·02994			
7. 8	32. 10	7. 56	·1369	14. 26	·03017			
7. 16	30. 25	8. 19	·1376	15. 14	·03037			
7. 27	30. 50	8. 32	·1421	15. 26	·03035			
7. 45	26. 30	8. 39	·1402	15. 52	·03057			
7. 52:	28. 55	8. 55	·1375	16. 51	·03052			
8. 6	30. 15	9. 12	·1367	17. 11	·03038			
8. 15	28. 50	9. 26	·1388	17. 26	·03041			
8. 22	29. 10	9. 41	·1392	17. 57	·03037			
8. 28	26. 40	9. 57	·1351	18. 13	·03026			
8. 35	33. 40	10. 11	·1359	19. 52	·03037			
8. 45	31. 55	10. 19	·1362	20. 14	·03018			
8. 56	25. 0	10. 45	·1357	20. 44	·03004			
9. 7	24. 30	10. 56	·1363	21. 12	·03038			
9. 21	17. 10	11. 11	·1361	21. 54	·03020			
9. 46	28. 30	11. 12	·1365	22. 14	·03023			
9. 59	19. 15	11. 55	·1359	22. 26	·03033			
10. 28	29. 15	12. 18	·1354	22. 53	·03023			
10. 38	29. 35	12. 39	·1367	23. 12	·03034			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 4		Apr. 4		Apr. 4				
h m	° ′ ″	h m		h m		h m	°	°
10. 44	20. 28. 45	12. 46	·1357	23. 39	·03021			
10. 53	29. 5	13. 3	·1364	23. 59	·03021			
11. 1	27. 50	13. 19	·1356					
11. 25	27. 50	13. 20	·1359					
11. 39	27. 20	13. 39	·1357					
11. 52	27. 45	13. 54	·1364					
12. 2	30. 40	13. 59	·1361					
12. 13	36. 0	14. 27	·1370					
12. 29	41. 55	15. 15	·1361					
12. 52	30. 15	15. 30	·1355					
13. 9	41. 30	15. 56	·1360					
13. 18	41. 40	16. 53	·1376					
13. 39	35. 50	17. 15	·1369					
13. 42	35. 25	17. 41	·1373					
14. 6	29. 15	18. 12	·1366					
14. 16	28. 50	18. 51	·1340					
14. 24	27. 30	19. 13	·1345					
14. 48	24. 40	19. 50	·1342					
15. 14	25. 20	19. 57	·1365					
15. 25	24. 50	20. 41	·1331					
15. 50	30. 10	20. 58	·1293					
16. 46	33. 25	21. 14	·1314					
17. 13	29. 50	22. 20	·1341					
17. 21	30. 5	22. 41	·1345					
17. 36	28. 55	22. 58	·1335					
17. 50	30. 40	23. 23	·1345					
17. 59	28. 30	23. 39	·1342					
18. 15	28. 40	23. 59	·1350					
18. 28	29. 50							
18. 39	34. 40							
18. 46	34. 20							
18. 53	32. 40							
19. 4	33. 0							
19. 11	34. 40							
19. 16	32. 40							
19. 19	33. 20							
19. 29	31. 20							
	***							
19. 41	32. 50							
19. 48	35. 0							
20. 14	32. 40							
20. 24	32. 55							
20. 36	32. 10							
20. 55	32. 35							
21. 21	41. 25							
21. 30	42. 5							
21. 41	40. 30							
21. 58	34. 10							
22. 10	35. 5							
22. 14	34. 5							
22. 22	33. 10							
22. 30	37. 20							
22. 43	38. 40							
22. 54	35. 10							
22. 58	35. 30							
23. 2	34. 30							
23. 23	37. 10							
23. 28	35. 40							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 4								
h m	° ′ ″	h m		h m		h m	°	°
23. 45	20. 35. 40							
23. 59	37. 20							
Apr. 5		Apr. 5		Apr. 5		Apr. 5		
0. 0	20. 37. 20	0. 0	·1350	0. 0	·03021	0. 0	58 ·7	59 ·5
0. 4	37. 30	0. 14	·1359	0. 38	·03041	1. 0	59 ·0	59 ·6
0. 11	40. 0	0. 48	·1349	1. 24	·03077	3. 0	58 ·1	59 ·0
0. 23	38. 55	0. 57	·1354	2. 4	·03113	9. 0	58 ·8	59 ·7
0. 41	37. 50	1. 23	·1354	2. 21	·03103	21. 0	58 ·8	59 ·0
0. 55	39. 15	1. 29	·1347	2. 30	·03116			
1. 2	39. 15	1. 50	·1347	2. 39	·03112			
1. 18	40. 55	1. 52	·1334	4. 22	·03180			
1. 34	41. 10	1. 57	·1336	4. 42	·03154			
1. 39	40. 0	2. 2	·1360	5. 42	·03158			
1. 56	43. 0	2. 15	·1332	5. 54	·03176			
2. 5	40. 20	2. 27	·1343	6. 9	·03122			
2. 12	40. 5	2. 39	·1339	6. 19	·03152			
2. 26	41. 0	2. 41	·1341	6. 26	·03134			
2. 28	39. 40	2. 46	·1338	7. 8	·03119			
2. 56	40. 20	3. 22	·1355	7. 26	·03107			
3. 5	39. 45	3. 26	·1346	7. 41	·03116			
3. 11	41. 15	3. 36	·1356	9. 21	·03106			
3. 14	39. 55	3. 40	·1347	10. 26	·03064			
3. 25	40. 50	3. 55	·1362	10. 32	·03064			
3. 30	36. 40	4. 5	·1344	10. 56	·03000			
3. 39	37. 5	4. 26	·1401	11. 9	·03006			
3. 46	41. 10	4. 40	·1373	12. 24	·03063			
3. 58	31. 15	4. 49	·1366	12. 48	·03058			
4. 0	31. 10	5. 5	·1374	13. 24	·03066			
4. 10	26. 45	5. 12	·1366	13. 44	·03053			
4. 26	33. 55	5. 20	·1372	14. 26	·03044			
4. 35	33. 50	5. 25	·1363	15. 42	·03060			
4. 41	32. 5	5. 41	·1366	16. 56	·03077			
4. 58	35. 55	5. 55	·1399	17. 55	·03060			
5. 4	35. 20	6. 5	·1360	18. 26	·03076			
5. 12	36. 50	6. 22	·1395	19. 40	·03062			
5. 22	32. 45	6. 30	·1380	21. 55	·03059			
5. 30	31. 55	6. 41	·1365	22. 51	·03040			
5. 34	30. 45	6. 50	·1374	23. 59	·03040			
5. 41	25. 15	6. 58	·1371					
5. 47	34. 15	7. 11	·1378					
5. 52	34. 50	7. 18	·1367					
6. 7	25. 30	7. 26	·1355					
6. 26	27. 0	7. 38	·1367					
6. 2[illegible]	25. 20	7. 49	·1371					
6. 33	26. 55	8. 12	·1359					
6. 42	23. 40	8. 24	·1364					
6. 50	25. 15	8. 38	·1362					
6. 57	25. 5	9. 11	·1363					
7. 9	29. 5	9. 23	·1373					
7. 15	28. 10	9. 45	·1375					
7. 18	28. 25	10. 12	·1381					
7. 26	24. 45	10. 41	·1406					
7. 30	26. 50	10. 44	·1400					
7. 38	26. 45	10. 57	·1381					
7. 45	29. 15	11. 13	·1373					
7. 56	30. 10	11. 34	·1364					
8. 13	29. 20	12. 12	·1359					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 5		Apr. 5						
h m	° ′ ″	h m		h m		h m	°	°
8. 43	20. 32. 10	12. 43	·1365					
9. 1	32. 10	13. 11	·1359					
9. 12	30. 5	13. 26	·1353					
9. 33	33. 40	13. 38	·1358					
9. 42	31. 20	13. 44	·1354					
9. 56	30. 20	14. 15	·1358					
10. 7	30. 55	15. 30	·1366					
10. 16	30. 10	15. 51	·1366					
10. 39	42. 40	16. 37	·1360					
11. 0	33. 0	16. 55	·1363					
11. 11	31. 50	17. 12	·1365					
11. 15	32. 5	17. 36	·1360					
11. 28	30. 45	17. 44	·1364					
11. 41	31. 5	17. 57	·1356					
11. 56	29. 50	18. 24	·1355					
12. 18	29. 30	18. 41	·1356					
12. 49	25. 25	19. 12	·1361					
13. 15	32. 35	19. 26	·1353					
13. 38	37. 30	19. 41	·1355					
13. 46	36. 5	20. 14	·1343					
14. 1	36. 10	20. 21	·1345					
14. 11	35. 10	20. 40	·1340					
14. 20	35. 15	20. 56	·1341					
15. 5	31. 45	21. 11	·1346					
15. 14	31. 50	22. 7	·1351					
15. 30	28. 25	23. 14	·1347					
15. 39	29. 20	23. 33	·1356					
15. 58:	27. 10	23. 52	·1348					
16. 17	28. 20	23. 59	·1354					
16. 28	28. 10							
17. 0	31. 15							
17. 16	30. 20							
17. 29	30. 25							
17. 38	31. 45							
17. 54	29. 50							
18. 10	29. 30							
18. 33	31. 50							
18. 59	29. 35							
	***							
19. 30	29. 20							
19. 42	27. 45							
19. 51	28. 0							
20. 0	27. 30							
20. 11	27. 25							
20. 21:	29. 0							
20. 30	27. 55							
20. 37	28. 20							
21. 6	28. 0							
	***							
22. 1	32. 40							
22. 10	32. 0							
22. 44	33. 55							
22. 55	33. 25							
22. 59	35. 30							
23. 9	34. 25							
23. 18	34. 35							
23. 39	37. 30							
23. 59	38. 10							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 6		Apr. 6		Apr. 6		Apr. 6		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 38. 10	0. 0	·1354	0. 0	·03040	1. 0	59·3	60·3
0. 20	38. 55	0. 18	·1356	2. 22	·03084	3. 0	58·8	59·0
0. 40	39. 55	1. 15	·1367	3. 22	·03087	9. 0	58·8	60·0
1. 9	38. 40	1. 41	·1364	5. 6	·03117	21. 0	57·8	57·3
1. 27	39. 5	1. 55	·1367	5. 43	·03136			
1. 36	38. 40	2. 0	·1351	6. 3	·03110			
1. 49	38. 50	2. 10	·1362	6. 10	·03117			
1. 55	37. 0	2. 17	·1356	6. 14	·03105			
2. 6	36. 50	2. 20	·1373	6. 40	·03103			
	***	2. 25	·1354	6. 43	·03122			
2. 27	38. 10	2. 32	·1370	7. 0	·03113			
2. 31	36. 45	2. 37	·1352	7. 40	·03107			
2. 36	37. 50	2. 42	·1372	7. 52	·03070			
3. 4	36. 0	3. 6	·1361	7. 56	·03085			
3. 18	36. 0	3. 41	·1363	8. 11	·03077			
3. 31	35. 20	4. 55	·1380	8. 20	·03038			
4. 30	34. 25	5. 1	·1374	8. 41	·03040			
4. 39	36. 0	5. 21	·1366	8. 58	·02998			
4. 43	35. 20	5. 32	·1371	9. 19	·03038			
4. 54	35. 40	5. 45	·1407	9. 56	·03030			
5. 1	35. 15	5. 50	·1403	10. 23	·03056			
5. 9	35. 50	5. 52	·1407	10. 56	·03022			
5. 14	35. 0	6. 10	·1384	11. 7	·03038			
5. 21	34. 50	6. 12	·1374	11. 20	·03019			
5. 38	27. 30	6. 34	·1369	11. 52	·03036			
5. 51	33. 20	6. 40	·1371	12. 12	·03025			
6. 0	30. 20	6. 43	·1385	13. 54	·03041			
6. 9	31. 10	7. 10	·1373	14. 41	·03036			
6. 13	29. 40	7. 19	·1367	14. 55	·03037			
6. 20	29. 10	7. 40	·1399	15. 57	·03018			
6. 25	29. 30	7. 46	·1376	17. 54	·03036			
6. 38	24. 30	7. 55	·1404	19. 38	·03020			
6. 44	29. 15	8. 7	·1408	19. 52	·03018			
6. 54	30. 10	8. 15	·1385	22. 8	·03000			
7. 6	27. 45	8. 39	·1403		(†)			
7. 14	28. 40	8. 41	·1395	22. 37	·03540			
7. 25	27. 30	8. 48	·1366	23. 59	·03536			
7. 31	23. 30	9. 0	·1352					
7. 41	30. 10	9. 20	·1379					
7. 48	19. 20	9. 39	·1369					
8. 11	32. 35	9. 57	·1355					
8. 24	24. 10	10. 20	·1358					
8. 37	32. 30	10. 30	·1372					
8. 46	31. 20	10. 44	·1365					
9. 2	21. 25	10. 55	·1369					
9. 10	21. 15	11. 0	·1361					
9. 25	26. 30	11. 12	·1372					
9. 39	29. 10	11. 22	·1367					
9. 56:	25. 20	11. 43	·1368					
10. 14	24. 5	11. 56	·1375					
10. 38	33. 10	12. 16	·1367					
10. 53	32. 50	12. 41	·1370					
11. 0	30. 55	13. 40	·1355					
11. 13	37. 20	13. 45	·1359					
11. 28	33. 10	13. 58	·1356					
11. 41	30. 55	14. 13	·1365					
11. 56	33. 15	14. 30	·1367					
12. 15	27. 55	14. 56	·1353					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 6		Apr. 6						
h m	° ′ ″	h m		h m		h m	°	°
12. 36	20. 28. 20	15. 6	·1356					
12. 52	27. 40	15. 20	·1350					
13. 11	29. 25	15. 55	·1365					
13. 17	29. 5	18. 25	·1368					
13. 37	31. 55	20. 12	·1352					
13. 44	34. 15	20. 38	·1342					
13. 54	32. 45	21. 41	·1334					
14. 5	32. 55	21. 54	·1337					
14. 31	30. 20	22. 4	·1334					
14. 55	33. 10	22. 20	·1337					
15. 7	36. 35	22. 35	·1333					
15. 14	37. 55	23. 12	·1344					
15. 40	36. 15	23. 41	·1348					
15. 56	32. 50	23. 59	·1357					
16. 10	32. 5							
16. 43	30. 20							
16. 56	30. 55							
17. 9	30. 30							
17. 25	30. 55							
18. 6	30. 0							
18. 17	28. 30							
18. 21	31. 0							
	***							
18. 29	29. 20							
18. 33	29. 20							
	***							
19. 10	27. 45							
19. 16	29. 20							
19. 31	28. 40							
19. 45	30. 5							
20. 4	29. 0							
20. 30	30. 55							
	***							
20. 41	30. 40							
20. 53	31. 50							
21. 18	31. 10							
21. 39	32. 40							
21. 44	32. 15							
21. 53	33. 40							
22. 11	33. 55							
22. 27	35. 20							
22. 41	35. 0							
22. 50	36. 35							
22. 56	36. 0							
23. 19	36. 25							
23. 30	37. 55							
23. 40	37. 25							
23. 59	39. 35							
Apr. 7		Apr. 7		Apr. 7		Apr. 7		
0. 0	20. 39. 35	0. 0	·1357	0. 0	·03536	1. 0	59·0	60·1
0. 9	40. 10	0. 22	·1358	0. 49	·03546	3. 0	59·5	59·[illegible]
0. 25	41. 40	0. 44	·1350	1. 56	·03600	9. 0	58·8	59·5
0. 34	41. 25	1. 14	·1353	3. 12	·03606	21. 30	58·8	59·[illegible]
0. 50	42. 10	1. 22	·1350	3. 34	·03627			
1. 4	42. 0	2. 9	·1371	4. 21	·03657			
1. 39:	38. 30	2. 35	·1366	4. 25	·03643			
1. 56	39. 10	2. 55	·1371	4. 54	·03672			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

April 6d. 22h. 8m. Mr. Glaisher adjusted the plane mirror carried by the Vertical Force Magnet, producing an increase in the readings of 0·00540 parts of the whole Vertical Force.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 7		Apr. 7		Apr. 7				
h m	° ′ ″	h m		h m		h m	°	°
1. 58	20. 40. 40	3. 16	·1364	5. 12	·03678			
2. 8	40. 40	3. 41	·1374	6. 56	·03662			
2. 12	40. 25	4. 0	·1365	8. 44	·03643			
2. 17	39. 15	4. 12	·1357	9. 11	·03623			
2. 27	39. 0	4. 22	·1359	9. 26	·03619			
2. 57	39. 40	4. 25	·1350	9. 40	·03590			
3. 6	38. 45	4. 49	·1371	9. 52	·03598			
3. 14	38. 30	5. 11	·1381	10. 0	·03577			
3. 27	39. 10	5. 14	·1376	10. 22	·03558			
3. 39	38. 10	5. 22	·1378	10. 42	·03566			
3. 56	39. 30	5. 42	·1364	11. 19	·03547			
4. 14	36. 10	6. 14	·1369	11. 33	·03543			
4. 18	34. 30	6. 23	·1365	12. 40	·03565			
4. 29	31. 55	6. 45	·1368	12. 57	·03563			
4. 34	32. 40	6. 55	·1364	13. 30	·03582			
4. 44	32. 55	7. 14	·1370	14. 3	·03580			
4. 52	32. 0	7. 21	·1369	14. 54	·03586			
5. 8	34. 45	7. 34	·1376	15. 34	·03582			
5. 13	34. 20	7. 41	·1371	17. 6	·03582			
5. 17	34. 50	7. 56	·1374	17. 33	·03598			
5. 24	34. 25	8. 21	·1370	19. 44	·03600			
5. 30	32. 40	8. 40	·1374	20. 54	·03577			
5. 40	32. 45	8. 45	·1385	22. 41	·03562			
5. 51	34. 5	9. 14	·1381	23. 48	·03555			
5. 55	34. 0	9. 35	·1399	23. 59	·03566			
6. 1	34. 40	9. 44	·1394					
6. 25	32. 40	10. 0	·1386					
6. 42	32. 55	10. 11	·1388					
6. 49	32. 25	10. 25	·1369					
7. 5	32. 5	10. 44	·1378					
7. 12	33. 0	11. 3	·1376					
7. 28	31. 20	11. 19	·1378					
7. 39	33. 0	11. 42	·1363					
7. 59	32. 5	11. 57	·1360					
8. 12	32. 25	12. 12	·1364					
8. 24	33. 5	12. 36	·1357					
8. 38	31. 50	12. 43	·1360					
8. 51	33. 5	13. 12	·1353					
8. 56	32. 0	13. 27	·1357					
9. 11	32. 30	13. 49	·1359					
9. 24	31. 15	14. 11	·1356					
9. 29	33. 10	14. 36	·1361					
9. 41	32. 35	14. 51	·1358					
9. 54	36. 40	15. 11	·1364					
10. 2	32. 40	15. 52	·1355					
10. 12	34. 25	16. 10	·1360					
10. 29	30. 20	16. 41	·1363					
10. 37	31. 20	17. 12	·1361					
10. 44	31. 30	17. 35	·1356					
11. 15	20. 10	18. 22	·1365					
11. 25	20. 30	19. 23	·1359					
11. 31	21. 20	19. 36	·1365					
11. 38	21. 5	20. 43	·1356					
11. 45	21. 30	21. 8	·1343					
12. 26	28. 20	21. 30	·1340					
12. 38	29. 45	21. 55	·1346					
12. 49	28. 0	22. 10	·1344					
13. 11	29. 45	22. 45	·1354					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 7		Apr. 7						
h m	° ′ ″	h m		h m		h m	°	°
13. 23	20. 31. 45	23. 25	·1356					
13. 41	31. 40	23. 49	·1369					
13. 47	30. 0	23. 59	·1359					
13. 53	30. 20							
13. 58	29. 45							
14. 7	30. 10							
14. 14	29. 55							
14. 28	32. 5							
15. 6	31. 55							
15. 10	32. 40							
15. 23	31. 55							
15. 30	33. 5							
15. 58	34. 0							
16. 9	32. 45							
16. 24	32. 55							
16. 45	31. 25							
16. 56	31. 25							
17. 4	32. 15							
17. 23	32. 0							
17. 40	32. 35							
17. 53	31. 50							
	***							
18. 15	32. 10							
18. 34	31. 0							
18. 39	29. 30							
19. 14	27. 40							
19. 19	25. 10							
19. 27	28. 0							
20. 15	26. 15							
20. 34	27. 45							
20. 44	27. 30							
20. 55	29. 10							
21. 8	29. 20							
21. 12	29. 55							
21. 26	29. 40							
21. 31	31. 55							
	***							
21. 58	32. 0							
22. 14	33. 40							
22. 54	35. 0							
23. 9	34. 55							
23. 37	36. 20							
23. 42	36. 20							
23. 56	40. 50							
23. 59	41. 0							
Apr. 8		Apr. 8		Apr. 8		Apr. 8		
0. 0	20. 41. 0	0. 0	·1359	0. 0	·03566	0. 30	59·3	59·7
0. 8	41. 5	0. 41	·1367	0. 34	·03562	9. 10	59·3	60·5
0. 13	39. 55	0. 56	·1376	1. 23	·03586	21. 0	59·8	61·0
0. 26	39. 35	1. 13	·1375	1. 36	·03584			
0. 53	40. 40	1. 19	·1368	2. 12	·03607			
1. 7	43. 20	1. 36	·1371	2. 28	·03603			
1. 20	44. 20	1. 58	·1366	3. 8	·03612			
1. 32	43. 15	2. 12	·1352	3. 26	·03628			
1. 43	43. 50	2. 50	·1366	4. 0	·03632			
1. 54	43. 35	3. 13	·1375	6. 15	·03662			
2. 2	44. 0	3. 50	·1370	6. 29	·03676			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 8		Apr. 8		Apr. 8				
h m	° ′ ″	h m		h m		h m	°	°
2. 9	20. 43. 30	4. 8	·1373	7. 8	·03678			
2. 18	42. 0	4. 27	·1368	7. 22	·03656			
3. 0	39. 20	4. 42	·1373	7. 35	·03661			
3. 25	39. 55	4. 54	·1370	8. 24	·03635			
3. 56	38. 10	5. 8	·1372	8. 48	·03624			
4. 13	38. 20	5. 14	·1367	9. 22	·03633			
4. 29	36. 40	5. 40	·1377	9. 57	·03624			
4. 41	35. 50	6. 11	·1368	10. 28	·03626			
4. 50	36. 20	6. 18	·1377	10. 50	·03643			
4. 55	35. 35	6. 26	·1374	11. 12	·03618			
5. 8	36. 0	6. 41	·1378	11. 40	·03603			
5. 24	34. 55	7. 14	·1370	12. 42	·03637			
5. 39	35. 45	7. 27	·1386	12. 57	·03652			
5. 44	35. 35	7. 57	·1399	13. 12	·03624			
5. 55	34. 30	8. 10	·1389	13. 36	·03626			
6. 5	34. 20	8. 15	·1372	14. 11	·03637			
6. 18	31. 0	8. 25	·1376	15. 4	·03664			
6. 26	31. 15	8. 43	·1364	17. 15	·03683			
6. 58	30. 5	8. 54	·1368	18. 11	·03696			
7. 2	30. 40	9. 8	·1363	19. 34	·03686			
7. 12	24. 10	9. 19	·1369	20. 45	·03664			
7. 23	17. 0	10. 34	·1356	21. 55	·03660			
7. 44	13. 40	10. 43	·1358	23. 40	·03626			
8. 10	22. 10	10. 53	·1366	23. 51	·03638			
8. 19	19. 20	11. 5	·1369	23. 59	·03620			
8. 28	22. 40	11. 12	·1366					
8. 43	22. 20	11. 25	·1377					
8. 55	27. 20	11. 56	·1367					
9. 6	27. 20	12. 44	·1364					
9. 26	29. 5	13. 11	·1381					
9. 56	26. 25	14. 12	·1362					
10. 23	27. 0	15. 19	·1363					
	(†)	15. 42	·1368					
10. 37	36. 0	16. 10	·1361					
10. 51	39. 55	18. 19	·1361					
11. 4	37. 35	18. 55	·1357					
11. 13	37. 25	21. 10	·1348					
11. 30	32. 55	21. 39	·1345					
11. 54	29. 45	22. 11	·1346					
12. 15	29. 50	22. 25	·1341					
12. 24	29. 30	22. 30	·1344					
12. 32	29. 55	22. 55	·1340					
12. 36	29. 50	23. 41	·1351					
12. 40	35. 30	23. 48	·1348					
12. 43	35. 40	23. 53	·1350					
13. 11	34. 35		(†)					
13. 24	35. 10							
14. 10	31. 35							
14. 42	31. 35							
14. 53	32. 15							
14. 59	32. 5							
15. 13	30. 10							
15. 20	30. 15							
15. 32	28. 30							
16. 10:	31. 20							
16. 18	30. 40							
16. 36	31. 40							
16. 53	31. 55							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 8								
h m	° ′ ″	h m		h m		h m	°	°
16. 58	20. 31. 0							
17. 38	30. 40							
18. 51	28. 20							
19. 13	28. 15							
19. 18	27. 35							
19. 20	27. 45							
19. 41	27. 20							
20. 3	27. 55							
20. 11	27. 35							
21. 17	30. 55							
21. 51	32. 40							
22. 14	34. 30							
	***							
23. 43	40. 0							
23. 59	39. 30							
Apr. 9		Apr. 9		Apr. 9		Apr. 9		
0. 0	20. 39. 30		(†)	0. 0	·03620	1. 0	58·8	58·5
1. 14	39. 40	0. 11	·1355	2. 0	·03645	3. 0	58·8	58·2
1. 43	37. 55	1. 14	·1366	5. 42	·03625	9. 0	58·2	58·8
2. 59	35. 15	1. 26	·1364	8. 57	·03583	21. 0	59·5	60·5
3. 43	34. 5	3. 2	·1371	10. 41	·03577			
4. 26	32. 50	3. 44	·1370	11. 20	·03604			
4. 36	31. 50	4. 41	·1371	17. 24	·03623			
5. 28	30. 20	5. 12	·1376	19. 40	·03637			
6. 41	31. 30	6. 15	·1372	21. 19	·03603			
7. 10	30. 50	6. 56	·1378	22. 26	·03607			
7. 58	31. 55	8. 25	·1374	23. 59	·03588			
8. 28	31. 0	8. 44	·1377					
8. 56	31. 35	8. 59	·1374					
9. 0	31. 35	9. 13	·1378					
9. 18	32. 15	9. 37	·1373					
9. 26	32. 5	9. 47	·1375					
9. 41	32. 40	12. 6	·1367					
10. 13	32. 0	12. 39	·1369					
10. 31	32. 45	12. 59	·1367					
12. 2	31. 35	13. 14	·1368					
12. 13	32. 15	13. 41	·1366					
12. 22	32. 5	14. 16	·1364					
12. 34	33. 0	14. 57	·1367					
12. 56	31. 55	15. 14	·1365					
13. 9	32. 10	17. 55	·1369					
13. 28	31. 20	19. 19	·1365					
13. 53	31. 25	21. 42	·1347					
14. 3	32. 10	23. 54	·1356					
14. 55	30. 40	23. 59	·1359					
15. 28	30. 20							
15. 56	31. 10							
16. 47	31. 15							
17. 41	30. 30							
18. 53	27. 25							
19. 13	27. 45							
19. 28	27. 10							
20. 5	27. 20							
21. 42	30. 40							
22. 36	34. 40							
23. 14	35. 0							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 9								
h m	° ′ ″	h m		h m		h m	°	°
23. 47	20. 35. 55							
23. 59	36. 30							
Apr. 10		Apr. 10		Apr. 10		Apr. 10		
0. 0	20. 36. 30	0. 0	·1359	0. 0	·03588	1. 0	59·5	60·1
0. 14	38. 0	0. 32	·1364	1. 16	·03600	3. 0	59·6	60·1
0. 42	38. 25	1. 56	·1367	2. 35	·03626	9. 0	58·8	58·6
1. 26	38. 0	2. 22	·1371	4. 51	·03637	21. 0	58·9	59·3
5. 10	31. 55	4. 9	·1371	9. 22	·03616	22. 0	59·3	59·3
6. 27	31. 40	4. 36	·1374	14. 12	·03620	23. 0	59·0	59·8
7. 18	32. 10	6. 0	·1371	17. 19	·03617			
10. 9	32. 30	6. 18	·1375	18. 45	·03620			
12. 53	31. 45	6. 41	·1374	23. 21	·03558			
13. 28	31. 0	6. 54	·1377	23. 59	·03564			
15. 34	30. 20	7. 50	·1374					
16. 7	30. 0	8. 3	·1377					
16. 30:	30. 20	12. 47	·1370					
16. 48	29. 50	13. 12	·1373					
17. 4	29. 50	14. 11	·1370					
17. 51	28. 40	17. 53	·1370					
18. 15	29. 25	18. 14	·1367					
18. 29	28. 40	18. 43	·1371					
18. 38	28. 40	18. 59	·1368					
18. 44	27. 35	19. 53	·1372					
18. 49	28. 15	20. 11	·1366					
18. 56	27. 5	20. 29	·1370					
18. 59	27. 40	21. 9	·1361					
19. 14	27. 0	22. 22	·1359					
19. 16	26. 0	23. 20	·1359					
19. 20	26. 0	23. 59	·1365					
19. 24	24. 15							
19. 28	25. 5							
19. 42	25. 30							
19. 46	26. 20							
19. 49	25. 15							
19. 55	27. 40							
19. 59	25. 25							
20. 18	26. 15							
20. 23	25. 30							
20. 27	27. 10							
20. 40	27. 0							
20. 55	27. 45							
21. 6	27. 0							
21. 26	28. 55							
23. 4	34. 10							
23. 36	37. 25							
23. 41	37. 10							
23. 59	39. 15							
Apr. 11		Apr. 11		Apr. 11		Apr. 11		
0. 0	20. 39. 15	0. 0	·1365	0. 0	·03564	0. 0	59·[illegible]	60·6
0. 41	41. 25	0. 10	·1369	1. 18	·03582	1. 0	59·9	60·8
0. 55	40. 30	0. 42	·1369	1. 56	·03625	2. 0	59·9	60·8
1. 21	40. 50	0. 58	·1358	4. 34	·03677	3. 0	59·[illegible]	60·8
1. 28	41. 45	1. 21	·1361	9. 19	·03646	9. 0	59·2	60·0
1. 36	41. 30	1. 41	·1367	12. 51	·03616	21. 0	58·3	58·6
1. 40	41. 50	2. 11	·1373	13. 42	·03596	22. 0	58·4	58·9
1. 59	41. 55	2. 34	·1364	15. 15	·03585	23. 0	58·5	58·9

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 11		Apr. 11		Apr. 11				
h m	° ′ ″	h m		h m		h m	°	°
2. 20	20. 39. 45	2. 44	·1367	15. 58	·03564			
2. 29	39. 30	2. 57	·1366	17. 12	·03556			
2. 38	39. 35	3. 12	·1369	18. 20	·03562			
3. 14	38. 40	3. 24	·1367	18. 52	·03556			
3. 26	39. 5	3. 41	·1372	19. 33	·03560			
3. 43	38. 30	3. 56	·1370	19. 52	·03556			
3. 57	38. 40	4. 18	·1358	20. 12	·03560			
4. 55	35. 30	4. 41	·1365	20. 44	·03544			
5. 11	35. 30	4. 55	·1363	21. 29	·03540			
5. 41	34. 25	5. 21	·1365	21. 54	·03556			
6. 21:	32. 0	5. 54	·1367	22. 1	·03548			
7. 4	31. 10	6. 20	·1372	22. 11	·03555			
7. 16	30. 35	6. 34	·1378	22. 19	·03543			
7. 43	31. 10	6. 51	·1380	22. 34	·03557			
7. 58	30. 25	7. 20	·1378	23. 26	·03546			
8. 39	30. 50	7. 51	·1381	23. 59	·03527			
8. 53	31. 25	8. 26	·1379					
9. 27	31. 40	9. 20	·1380					
9. 43	32. 5	10. 10	·1376					
11. 39	31. 10	10. 20	·1380					
11. 53	30. 20	11. 26	·1374					
12. 24	31. 5	12. 10	·1378					
12. 44	31. 20	12. 43	·1374					
13. 6	33. 40	13. 19	·1375					
13. 41	30. 45	13. 33	·1378					
14. 10	29. 30	14. 41	·1372					
14. 39	28. 45	15. 13	·1367					
14. 51	29. 45	16. 9	·1377					
14. 59	29. 45	17. 40	·1378					
15. 10	31. 40	18. 12	·1385					
15. 39	34. 20	18. 34	·1384					
15. 54	32. 55	19. 59	·1339					
15. 57	31. 50	20. 12	·1342					
16. 23	31. 30	20. 45	·1329					
16. 28	32. 0	21. 6	·1326					
17. 55	28. 35	21. 12	·1329					
18. 3	29. 30	21. 37	·1327					
18. 10	28. 30	22. 12	·1341					
18. 16	28. 20	22. 25	·1346					
18. 27:	29. 40	22. 45	·1342					
18. 46	26. 25	23. 30	·1366					
18. 51	27. 35	23. 49	·1356					
19. 6	27. 30	23. 59	·1351					
19. 16	29. 50							
19. 19	29. 5							
19. 32	30. 50							
19. 41	30. 20							
19. 56	31. 10							
20. 11	34. 40							
20. 26	34. 40							
20. 32	36. 20							
20. 38	35. 15							
20. 43	37. 30							
20. 54	37. 35							
20. 57	37. 10							
21. 26	38. 20							
21. 39	39. 50							
21. 41	39. 10							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.11								
h m	° ′ ″	h m		h m		h m	°	°
21. 47	20. 42. 50							
21. 53	42. 10							
22. 4	43. 0							
22. 13	40. 20							
22. 22	42. 10							
22. 33	41. 0							
22. 43	38. 40							
22. 56	37. 20							
23. 12	38. 25							
23. 26	40. 30							
23. 39	41. 5							
23. 51	40. 40							
23. 59	41. 10							
Apr.12		Apr.12		Apr.12		Apr.12		
0. 0	20. 41. 10	0. 0	·1351	0. 0	·03527	0. 0	58 ·8	59 ·0
0. 31	42. 55	0. 36	·1356	0. 44	·03540	1. 0	59 ·0	59 ·2
1. 9	40. 40	0. 41	·1361	2. 43	·03576	2. 0	58 ·9	59 ·4
1. 20	40. 25	0. 43	·1366	4. 44	·03600	3. 0	59 ·2	59 ·3
1. 25	41. 0	1. 22	·1368	8. 41	·03584	9. 0	58 ·8	59 ·7
1. 41	39. 40	1. 29	·1373	12. 29	·03600	21. 0	58 ·9	59 ·0
1. 49	39. 55	1. 43	·1366	18. 50	·03600			
2. 11	37. 55	1. 56	·1370	21. 6	·03577			
2. 20	38. 15	2. 18	·1364	23. 25	·03562			
2. 59	36. 30		***	23. 59	·03566			
3. 16	36. 35	2. 51	·1367					
4. 7	34. 55	3. 10	·1362					
4. 20	35. 10	3. 27	·1368					
4. 29	33. 40	3. 55	·1373					
5. 26	32. 30	4. 12	·1370					
6. 11	31. 20	4. 25	·1377					
6. 30	31. 40	4. 56	·1377					
7. 0	31. 25	5. 11	·1374					
8. 8	31. 50	5. 49	·1378					
8. 12	31. 15	6. 10	·1374					
8. 23	31. 30	6. 20	·1378					
8. 27	30. 45	7. 19	·1379					
8. 32	31. 30	7. 24	·1381					
9. 12	31. 20	7. 36	·1376					
9. 26	31. 50	7. 55	·1383					
9. 34	31. 40	8. 12	·1382					
9. 44	32. 40	8. 14	·1375					
9. 54	31. 45	8. 22	·1379					
10. 20	31. 50	8. 27	·1368					
11. 53	31. 20	8. 36	·1372					
12. 9	31. 40	8. 51	·1375					
12. 15	31. 10	9. 20	·1369					
12. 26	31. 45	9. 27	·1373					
13. 40	31. 30	9. 41	·1371					
14. 19	30. 40	9. 55	·1389					
14. 20	31. 20	10. 14	·1379					
15. 27	30. 40	10. 25	·1381					
16. 4	30. 50	10. 57	·1378					
17. 19	29. 45	12. 20	·1376					
19. 26	26. 0	12. 30	·1371					
20. 16	25. 45	12. 48	·1374					
20. 40	26. 20	13. 40	·1372					
20. 46	26. 20	13. 48	·1373					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.12		Apr.12						
h m	° ′ ″	h m		h m		h m	°	°
21. 40	20. 29. 25	14. 12	·1373					
23. 26	37. 20	14. 22	·1369					
23. 36	37. 20	14. 42	·1373					
23. 59	38. 45	17. 9	·1374					
		17. 36	·1371					
		18. 58	·1370					
		20. 41	·1360					
		20. 52	·1363					
		21. 41	·1355					
		23. 11	·1354					
		23. 59	·1359					
Apr.13		Apr.13		Apr.13		Apr.13		
0. 0	20. 38. 45	0. 0	·1359	0. 0	·03566	1. 0	59 ·8	61 ·0
0. 11	38. 45	0. 21	·1363	0. 42	·03580	3. 0	59 ·8	61 ·0
0. 24	39. 30	0. 31	·1365	2. 34	·03618	9. 0	59 ·7	60 ·8
0. 28	40. 10	1. 12	·1366	3. 16	·03614	21. 0	58 ·5	58 ·6
1. 15	39. 15	2. 8	·1368	4. 28	·03635			
2. 1	37. 30	2. 44	·1376	8. 56	·03626			
3. 11	35. 30	3. 10	·1374	11. 49	·03624			
3. 25	34. 30	3. 14	·1376	17. 26	·03582			
4. 43	32. 40	3. 29	·1370	19. 53	·03571			
4. 55	34. 10	3. 51	·1374	23. 59	·03525			
4. 58	33. 50	4. 41	·1378					
5. 7	34. 20	4. 50	·1376					
5. 24	32. 10	5. 7	·1383					
7. 9	32. 30	5. 26	·1376					
7. 44	31. 55	5. 41	·1379					
7. 53	32. 45	5. 53	·1377					
7. 58	32. 15	6. 12	·1377					
9. 29	31. 55	6. 26	·1380					
9. 56	32. 25	6. 43	·1378					
12. 46	32. 10	7. 12	·1377					
16. 24	31. 25	7. 40	·1380					
17. 0	30. 50	7. 55	·1377					
17. 30	30. 0	8. 25	·1379					
17. 46	30. 15	9. 26	·1376					
18. 39	28. 55	14. 55	·1373					
18. 44	28. 0	16. 55	·1373					
19. 38	26. 25	17. 41	·1371					
19. 55	24. 50	18. 24	·1374					
20. 1	26. 0	21. 31	·1355					
20. 25	26. 20	21. 43	·1361					
20. 34	25. 55	21. 58	·1358					
21. 2	27. 5	22. 24	·1362					
21. 23	27. 5	22. 54	·1361					
21. 29	27. 40	23. 3	·1353					
21. 36	32. 5	23. 10	·1359					
22. 13	34. 10	23. 19	·1355					
22. 23	33. 5	23. 59	·1362					
22. 53	35. 20							
22. 56	34. 45							
23. 13	36. 55							
23. 21	36. 25							
23. 59	39. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 14		Apr. 14		Apr. 14		Apr. 14		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 39. 30	0. 0	·1362	0. 0	·03525	1. 0	59·4	60·1
0. 23	40. 55	0. 15	·1367	2. 22	·03592	3. 0	59·6	59·9
0. 27	40. 40	0. 38	·1368	6. 10	·03629	9. 0	59·8	59·4
0. 35	42. 20	0. 45	·1375	6. 43	·03620	21. 0	58·3	59·0
0. 45	42. 0		***	9. 0	·03634			
1. 11	42. 35	3. 11	·1382	10. 26	·03622			
1. 23	41. 45	3. 56	·1375	10. 55	·03600			
1. 32	41. 40	4. 11	·1368	14. 42	·03597			
1. 45	40. 30	4. 15	·1371	19. 35	·03577			
2. 11	39. 55	4. 27	·1367	21. 53	·03524			
2. 20	38. 50	4. 41	·1369	22. 49	·03522			
3. 51	35. 0	4. 51	·1367	23. 59	·03537			
4. 6	34. 25	5. 22	·1376					
4. 39	33. 40	5. 33	·1374					
	***	6. 11	·1382					
5. 17	31. 45	6. 55	·1376					
5. 28	29. 35	7. 17	·1373					
6. 5	29. 40	7. 54	·1375					
6. 34	31. 30	8. 40	·1368					
6. 53	31. 20	8. 47	·1368					
7. 12	31. 45	9. 12	·1366					
7. 26	30. 45	9. 34	·1372					
7. 43	30. 40	9. 47	·1374					
7. 53	31. 20	10. 12	·1371					
7. 59	30. 50	10. 20	·1378					
8. 9	31. 5	10. 37	·1375					
8. 14	30. 40	10. 40	·1379					
8. 24	30. 40	10. 44	·1376					
8. 40	29. 10	11. 14	·1378					
8. 55	30. 5	13. 6	·1369					
9. 12	29. 55	13. 14	·1371					
9. 36	31. 0	14. 22	·1368					
9. 55	29. 55	15. 33	·1370					
10. 7	30. 5	16. 43	·1369					
10. 12	29. 20	17. 41	·1370					
10. 22	29. 40	19. 51	·1364					
10. 30	31. 40	21. 22	·1352					
10. 57	28. 40	22. 42	·1356					
11. 10	28. 20	22. 55	·1360					
11. 43	29. 10	23. 59	·1371					
11. 55	30. 0							
12. 11	29. 55							
13. 4	32. 0							
13. 13	32. 10							
13. 39	31. 10							
14. 9	31. 10							
14. 41	30. 5							
15. 36	29. 40							
16. 9	30. 20							
16. 19	30. 10							
16. 39	31. 10							
17. 13:	29. 45							
17. 54	29. 30							
19. 11	27. 30							
19. 17	25. 30							
19. 26	27. 10							
20. 27	27. 0							
21. 20	29. 5							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 14								
h m	° ′ ″	h m		h m		h m	°	°
22. 41	20. 36. 10							
23. 59	39. 45							
Apr. 15		Apr. 15		Apr. 15		Apr. 15		
0. 0	20. 39. 45	0. 0	·1371	0. 0	·03537	0. 25	59·0	59·0
0. 18	39. 50	0. 36	·1376	2. 23	·03576	9. 0	59·3	60·0
0. 26	40. 20	0. 41	·1372	4. 11	·03582	21. 0	58·8	58·8
0. 36	39. 45	1. 25	·1380	4. 55	·03600			
1. 8:	40. 20	1. 56	·1379	12. 56	·03572			
1. 26	39. 20	2. 22	·1382	19. 11	·03565			
3. 42	34. 40	2. 42	·1380	20. 5	·03548			
4. 3	33. 40	2. 54	·1381	20. 12	·03553			
4. 18	32. 40	3. 11	·1378	20. 34	·03540			
4. 35	32. 0	3. 50	·1379	21. 54	·03542			
5. 6	32. 30	4. 21	·1370	22. 49	·03518			
8. 27	31. 30	5. 11	·1378	23. 19	·03504			
10. 18	32. 10	5. 30	·1377	23. 59	·03516			
10. 53	31. 55	6. 3	·1379					
11. 9	31. 55	6. 36	·1378					
11. 45	31. 30	6. 51	·1380					
12. 9	32. 50	7. 3	·1378					
13. 8	31. 10	7. 12	·1380					
13. 21	31. 35	8. 12	·1375					
14. 10	31. 20	11. 22	·1380					
16. 2	29. 20	11. 57	·1378					
16. 28	29. 30	12. 38	·1382					
16. 40	28. 50	13. 19	·1377					
16. 58	28. 55	14. 6	·1376					
17. 12	28. 5	14. 29	·1381					
17. 28	29. 50	15. 53	·1381					
17. 41	29. 20	16. 20	·1379					
17. 58	30. 0	16. 55	·1382					
18. 21	29. 20	17. 20	·1376					
18. 42	29. 55	17. 40	·1377					
18. 57	33. 0	17. 55	·1372					
19. 16	34. 40	18. 21	·1375					
19. 32	34. 35	19. 18	·1361					
19. 39	33. 45	19. 53	·1368					
19. 43	33. 50	19. 58	·1366					
19. 54	32. 30	20. 21	·1374					
19. 57	32. 50	21. 23	·1357					
20. 8	33. 40	21. 38	·1361					
20. 23:	30. 50	21. 48	·1354					
20. 44	28. 45	22. 10	·1361					
21. 21	27. 30	23. 11	·1351					
21. 30	28. 45	23. 22	·1347					
21. 42	29. 15	23. 59	·1353					
21. 47	28. 5							
22. 22	31. 0							
22. 56	34. 30							
23. 11	35. 5							
23. 19	34. 50							
23. 39	37. 30							
23. 56	39. 40							
23. 59	39. 45							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol **:** attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 16		Apr. 16		Apr. 16		Apr. 16		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 39. 45	0. 0	·1353	0. 0	·03516	1. 0	59·1	59·6
0. 29,	40. 20	0. 22	·1356	1. 16	·03537	3. 0	59·1	59·7
0. 40	41. 20	0. 54	·1361	1. 55	·03560	9. 0	59·0	58·8
0. 51	41. 20	1. 6	·1367	2. 30	·03573	21. 0	58·4	57·7
0. 56	42. 50	1. 25	·1361	4. 10	·03577			
1. 12	43. 10	2. 11	·1367	7. 8	·03601			
1. 23	42. 35	2. 26	·1361	10. 42	·03577			
	***	3. 44	·1373	14. 14	·03563			
1. 41	43. 0	4. 25	·1372	18. 57	·03540			
2. 25	41. 40	5. 12	·1381	19. 11	·03549			
3. 7	38. 50	6. 11	·1370	22. 56	·03484			
3. 33	38. 40	6. 22	·1376	23. 59	·03497			
4. 31	35. 35	6. 46	·1369					
5. 9	35. 40	7. 19	·1371					
5. 14	34. 55	7. 53	·1376					
5. 32	35. 10	8. 41	·1373					
5. 56	33. 20	9. 14	·1381					
6. 6	32. 10	9. 41	·1377					
6. 56	29. 55	10. 12	·1379					
7. 9	30. 55	10. 25	·1376					
7. 28	31. 25	12. 41	·1377					
7. 42	30. 55	12. 50	·1380					
7. 58	32. 0	12. 59	·1373					
8. 28	31. 10	13. 12	·1376					
9. 11	31. 55	14. 4	·1373					
9. 28	31. 30	15. 36	·1375					
10. 12	31. 30	15. 56	·1378					
11. 56	30. 55	16. 27	·1368					
12. 27	31. 5	17. 58	·1376					
13. 7	31. 40	19. 12	·1370					
13. 38	30. 20	19. 22	·1365					
14. 11	30. 25	19. 45	·1361					
14. 25	30. 50	20. 22	·1366					
15. 10	29. 55	21. 4	·1364					
15. 22	30. 30	21. 51	·1355					
15. 31	30. 0	21. 59	·1358					
15. 40	30. 0	22. 22	·1357					
16. 7	27. 50	22. 57	·1350					
16. 12	29. 10	23. 21	·1350					
16. 30	30. 0	23. 44	·1356					
16. 43	32. 10	23. 59	·1359					
17. 25	31. 20							
17. 35	29. 40							
17. 46	29. 50							
17. 56	29. 20							
18. 6	29. 30							
18. 48	26. 10							
19. 0	28. 20							
19. 12	29. 20							
19. 25	28. 20							
19. 33	28. 55							
	***							
20. 3	26. 40							
20. 23	27. 10							
20. 30	26. 35							
20. 54	26. 35							
20. 58	27. 10							
21. 28	27. 40							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 16								
h m	° ′ ″	h m		h m		h m	°	°
21. 45	20. 28. 10							
22. 26	32. 20							
22. 44	32. 0							
22. 56	32. 30							
23. 8	33. 50							
23. 12	33. 40							
23. 32	35. 20							
23. 48	35. 30							
23. 59	36. 40							
Apr. 17		Apr. 17		Apr. 17		Apr. 17		
0. 0	20. 36. 40	0. 0	·1359	0. 0	·03497	1. 0	59·8	60·3
0. 23	38. 45	0. 23	·1367	5. 26	·03590	3. 0	59·6	59·8
0. 41	39. 0	0. 41	·1365	6. 57	·03603	9. 0	59·8	60·0
0. 56	38. 45	0. 44	·1368	10. 6	·03603	21. 0	58·4	57·7
1. 43	40. 30	0. 56	·1365	10. 40	·03610	22. 0	59·2	59·6
2. 33	39. 0	3. 26	·1377	11. 0	·03578	23. 0	59·4	60·0
2. 56	39. 10	3. 43	·1374	11. 51	·03566			
3. 41	38. 20	4. 12	·1376	12. 8	·03553			
	***	4. 34	·1370	13. 12	·03523			
5. 27	34. 20	4. 54	·1377	13. 41	·03522			
5. 40	34. 30	5. 11	·1376	13. 57	·03504			
5. 59	33. 5	5. 15	·1379	14. 29	·03512			
6. 29	32. 50	5. 36	·1373	14. 49	·03479			
6. 33	32. 0	6. 6	·1378	15. 12	·03496			
6. 43	31. 45	6. 24	·1375	15. 39	·03483			
6. 52	33. 0	6. 35	·1378	16. 11	·03512			
6. 59	31. 45	6. 48	·1376	17. 12	·03544			
7. 12	32. 10	6. 56	·1381	18. 43	·03556			
7. 46	31. 45	8. 35	·1376	20. 24	·03548			
8. 42	31. 50	8. 47	·1378	21. 14	·03536			
9. 2	30. 55	9. 0	·1376	23. 59	·03527			
9. 12	31. 15	9. 18	·1377					
9. 16	30. 5	9. 49	·1370					
9. 44	28. 55	9. 55	·1374					
9. 55	29. 5	10. 20	·1363					
10. 15	27. 10	10. 41	·1370					
10. 25	28. 15	10. 51	·1364					
10. 36	32. 40	10. 55	·1369					
10. 47	32. 30	11. 10	·1360					
11. 27	20. 40	11. 31	·1366					
11. 41	18. 15	11. 58	·1381					
11. 49	19. 25	12. 14	·1374					
12. 0	18. 55	12. 25	·1376					
12. 46	20. 55	12. 43	·1372					
12. 56	19. 20	13. 6	·1363					
13. 10	18. 55	13. 18	·1360					
13. 33	23. 25	13. 42	·1373					
13. 51	19. 10	14. 11	·1358					
14. 4	21. 25	14. 27	·1341					
14. 18	27. 10	14. 43	·1355					
14. 30	33. 55	15. 25	·1376					
14. 46	35. 55	15. 43	·1383					
15. 0	35. 45	16. 14	·1367					
15. 16	33. 10	16. 28	·1374					
15. 43	27. 10	17. 10	·1364					
15. 50	26. 50	17. 14	·1368					
16. 2	29. 40	17. 44	·1369					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.17		Apr.17						
h m	° ′ ″	h m		h m		h m	°	°
16. 37	20. 28. 20	18. 11	·1364					
16. 52	29. 40	20. 19	·1359					
16. 59	29. 10	20. 54	·1351					
17. 14	29. 20	21. 49	·1346					
17. 19	28. 50	22. 22	·1348					
17. 28	28. 20	22. 47	·1345					
17. 38	29. 30	23. 11	·1355					
17. 51	28. 20	23. 43	·1346					
18. 12	27. 40	23. 56	·1351					
18. 16	28. 25	23. 59	·1348					
18. 35	28. 0							
19. 12	26. 5							
19. 18	26. 45							
19. 29	26. 40							
19. 32	25. 40							
19. 46	26. 10							
20. 10	25. 45							
20. 13	27. 20							
20. 21	25. 30							
20. 28	27. 10							
20. 53	26. 55							
21. 52	29. 0							
21. 56	30. 10							
22. 6	29. 55							
22. 31	31. 15							
22. 39	30. 40							
22. 53	31. 50							
23. 6	34. 5							
23. 15	35. 0							
23. 39	35. 10							
23. 55	36. 50							
23. 59	36. 40							
Apr.18		Apr.18		Apr.18		Apr.18		
0. 0	20. 36. 40	0. 0	·1348	0. 0	·03527	0. 0	59 ·8	60 ·4
0. 39	41. 30	0. 22	·1360	0. 51	·03534	1. 0	59 ·8	60 ·4
0. 42	41. 10	0. 56	·1351	2. 53	·03608	3. 0	60 ·3	61 ·4
0. 54	41. 10	1. 11	·1354	3. 27	·03638	9. 0	60 ·3	60 ·0
1. 4	41. 50	1. 16	·1349	3. 36	·03627	21. 0	59 ·8	59 ·7
1. 28	42. 20	1. 34	·1353	4. 12	·03672	22. 0	59 ·6	60 ·1
1. 43	43. 40	2. 11	·1368	7. 12	·03663	23. 0	59 ·8	60 ·2
	***	2. 20	·1364	7. 25	·03653			
2. 20	41. 10	2. 28	·1367	7. 40	·03664			
2. 41	40. 30	2. 52	·1366	9. 12	·03656			
2. 53	39. 30	3. 40	·1373	10. 26	·03653			
3. 9	39. 40	3. 44	·1360	10. 57	·03640			
3. 14	40. 0	4. 0	·1365	13. 45	·03634			
3. 32	38. 50	4. 15	·1379	14. 26	·03617			
	***	4. 55	·1369	16. 8	·03622			
3. 43	36. 15	5. 30	·1371	18. 54	·03605			
3. 46	36. 5	6. 10	·1366	20. 25	·03577			
4. 8	32. 0	7. 13	·1369	22. 26	·03556			
5. 8	35. 20	7. 25	·1363	23. 59	·03558			
5. 43	35. 30	7. 41	·1379					
6. 21	33. 45	7. 57	·1366					
6. 43	33. 45	8. 12	·1370					
7. 6	33. 0	8. 38	·1373					
7. 22	32. 55	8. 55	·1367					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.18		Apr.18						
h m	° ′ ″	h m		h m		h m	°	°
7. 38	20. 25. 5	9. 44	·1364					
7. 46	28. 40	9. 56	·1367					
8. 0	30. 45	10. 16	·1365					
8. 7	30. 35	10. 28	·1369					
8. 13	31. 45	11. 26	·1367					
8. 39	30. 0	11. 53	·1370					
8. 46	30. 10	12. 41	·1370					
8. 58	29. 40	13. 46	·1365					
9. 19	30. 30	14. 13	·1373					
9. 34	30. 15	14. 49:	·1368					
9. 56:	29. 30	16. 11	·1366					
10. 10	30. 20	17. 26	·1374					
10. 26	30. 10	18. 22	·1368					
10. 38	30. 50	19. 2	·1372					
11. 12	27. 10	19. 56	·1367					
11. 15	27. 5	20. 25	·1359					
11. 21	27. 45	21. 25	·1357					
11. 31	27. 50	22. 27	·1350					
12. 7	30. 0	22. 43	·1353					
12. 29	29. 55	23. 26	·1355					
12. 46	28. 30	23. 51	·1361					
13. 20:	27. 40	23. 59	·1355					
13. 50	31. 40							
14. 2	31. 20							
14. 22	29. 40							
14. 45	28. 45							
14. 58	29. 30							
15. 13	29. 20							
16. 25	30. 55							
17. 24	30. 40							
17. 38	30. 5							
17. 46	30. 45							
18. 13	30. 10							
18. 30	29. 15							
18. 36	29. 20							
18. 39	28. 15							
18. 43	28. 55							
18. 46	28. 45							
18. 53	29. 10							
19. 18	28. 30							
19. 28	27. 55							
19. 49	27. 10							
19. 58	27. 40							
20. 12	27. 30							
20. 15	26. 55							
20. 54	27. 55							
21. 1	27. 40							
22. 14	30. 50							
22. 30	30. 20							
22. 37	31. 45							
22. 41	31. 25							
23. 20	34. 20							
23. 41	37. 5							
23. 53	37. 40							
23. 57	37. 5							
23. 59	37. 25							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 19		Apr. 19		Apr. 19		Apr. 19		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 37. 25	0. 0	·1355	0. 0	·03558	0. 0	59·8	61·0
0. 21	38. 25	0. 26	·1359	0. 32	·03563	1. 0	60·1	61·5
0. 27	38. 30	0. 35	·1358	0. 43	·03577	2. 0	60·1	61·5
0. 35	38. 5	0. 43	·1355	4. 44	·03646	3. 0	60·1	61·2
0. 42	39. 20	0. 51	·1360	5. 6	·03643	9. 0	59·8	60·1
0. 56	39. 10	1. 12	·1354	5. 30	·03660	21. 0	59·8	59·4
1. 9	38. 5	2. 21	·1364	6. 29	·03676			
2. 3	37. 45	2. 25	·1362	7. 49	·03673			
2. 26	36. 55	2. 43	·1367	8. 12	·03660			
2. 38	37. 0	3. 25	·1366	8. 28	·03668			
3. 26	35. 50	3. 55	·1373	9. 20	·03656			
3. 34	36. 5	4. 10	·1379	11. 25	·03644			
3. 56	35. 40	4. 15	·1374	11. 42	·03626			
4. 3	36. 25	4. 25	·1377	12. 40	·03610			
4. 9	35. 50	4. 52	·1374	12. 56	·03562			
4. 25	36. 25	5. 12	·1361	13. 28	·03587			
4. 52	36. 0	5. 28	·1369	13. 55	·03585			
5. 2	34. 10	5. 37	·1366	14. 43	·03617			
5. 8	34. 0	6. 26	·1379	16. 15	·03624			
5. 25	31. 20	6. 54	·1375	17. 42	·03607			
5. 44	30. 20	7. 11	·1378	18. 51	·03612			
5. 59	31. 35	7. 28	·1367	21. 15	·03580			
	***	7. 47	·1375	22. 42	·03572			
6. 32	31. 40	8. 11	·1358	23. 59	·03543			
6. 43	33. 5	8. 27	·1365					
7. 11	32. 25	8. 50	·1365					
7. 23	31. 50	9. 10	·1356					
7. 30	29. 45	9. 20	·1360					
7. 36	29. 35	9. 42	·1358					
7. 40	30. 0	10. 24	·1363					
7. 46	29. 50	10. 41	·1361					
7. 56	30. 25	11. 3	·1367					
8. 13	29. 40	11. 24	·1365					
8. 23	29. 50	11. 38	·1363					
8. 45	26. 25	11. 44	·1365					
8. 53	26. 40	11. 59	·1369					
9. 14	25. 20	12. 34	·1360					
9. 25	25. 30	12. 43	·1363					
9. 50	27. 30	12. 55	·1356					
9. 58	27. 0	13. 31	·1383					
10. 8	27. 10	14. 33	·1356					
10. 12	27. 55	15. 43	·1359					
10. 23	28. 25	16. 11	·1356					
10. 31	27. 50	16. 55	·1361					
10. 59	29. 55	17. 14	·1360					
11. 13	29. 20	17. 28	·1364					
11. 23	30. 55	19. 11	·1365					
11. 40	26. 50	21. 22	·1355					
11. 53	26. 25	22. 11	·1344					
11. 57	27. 40	22. 45	·1342					
12. 9	28. 45	23. 39	·1346					
12. 42	39. 50	23. 59	·1350					
13. 1	25. 0							
13. 14	22. 45							
13. 27	24. 10							
13. 32	26. 0							
13. 46	27. 40							
13. 59	27. 25							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 19								
h m	° ′ ″	h m		h m		h m	°	°
14. 13	20. 27. 40							
14. 23	28. 25							
14. 27	28. 10							
14. 41	29. 10							
15. 2	27. 30							
15. 29	27. 40							
15. 37	26. 55							
15. 53	29. 40							
16. 18	31. 10							
16. 44	30. 55							
17. 1	30. 15							
17. 12	28. 40							
17. 21	29. 55							
17. 29	29. 40							
17. 35	30. 0							
17. 45	29. 30							
19. 25	28. 5							
19. 58	27. 0							
20. 25	27. 25							
20. 32	26. 55							
20. 43	26. 50							
20. 58	27. 30							
	***							
21. 44	29. 30							
22. 0	30. 55							
22. 30	32. 15							
22. 38	32. 55							
22. 52	33. 0							
23. 7	33. 40							
23. 38	36. 0							
23. 59	37. 25							
Apr. 20		Apr. 20		Apr. 20		Apr. 20		
0. 0	20. 37. 25	0. 0	·1350	0. 0	·03543	1. 0	59·9	60·4
0. 11	37. 45	0. 13	·1348	0. 26	·03541	3. 0	58·6	59·9
0. 13	38. 55	0. 26	·1346	2. 42	·03592	9. 0	59·2	59·8
0. 16	37. 55	1. 0	·1363	4. 50	·03618	21. 0	58·6	59·0
0. 25	37. 0	1. 21	·1365	5. 26	·03637			
0. 42	37. 0	1. 52	·1363	5. 42	·03627			
1. 15	39. 50	2. 21	·1366	5. 56	·03636			
2. 22	39. 5	2. 41	·1363	6. 7	·03628			
2. 39	38. 10	2. 50	·1367	7. 25	·03614			
2. 45	38. 30	2. 57	·1364	11. 56	·03566			
2. 56	37. 45	3. 11	·1367	14. 0	·03561			
3. 3	38. 20	3. 30	·1366	14. 41	·03534			
4. 7	36. 0	3. 52	·1373	16. 9	·03536			
4. 16	36. 30	4. 12	·1371	19. 41	·03517			
4. 58	34. 45	5. 10	·1373	23. 4	·03468			
5. 6	32. 5	5. 29	·1384	23. 59	·03464			
5. 11	32. 5	5. 42	·1379					
5. 14	30. 0	5. 55	·1386					
5. 36	30. 0	6. 12	·1377					
5. 47	27. 10	6. 19	·1380					
5. 59	29. 5	6. 40	·1377					
6. 11	28. 15	6. 50	·1381					
6. 32	30. 15	7. 9	·1376					
6. 43	30. 25	7. 53	·1372					
6. 56	31. 10	8. 25	·1374					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.20		Apr.20						
h m	° ′ ″	h m		h m		h m	°	°
7. 41	20. 32. 0	8. 39	·1371					
7. 56	31. 25	8. 56	·1393					
8. 16	31. 25	9. 12	·1377					
8. 29	30. 10	9. 20	·1384					
8. 45	23. 30	9. 43	·1369					
8. 55	26. 10	9. 57	·1365					
9. 6	27. 0	10. 14	·1368					
9. 11	26. 20	10. 28	·1365					
9. 23	28. 25	11. 11	·1365					
9. 27	27. 35	11. 24	·1369					
9. 32	27. 40	12. 24	·1365					
9. 59	23. 0	13. 5	·1366					
10. 10	23. 10	13. 24	·1363					
10. 19	24. 40	14. 3	·1365					
10. 41	25. 0	14. 15	·1372					
10. 47	26. 40	14. 39	·1375					
10. 58	27. 5	14. 50	·1370					
11. 11	26. 25	14. 54	·1373					
11. 32	27. 30	15. 44	·1365					
11. 41	27. 10	16. 38	·1368					
11. 55	28. 20	18. 12	·1367					
12. 34	27. 20	19. 22	·1372					
12. 43	28. 10	20. 40	·1368					
12. 57	27. 40	20. 45	·1363					
13. 13	28. 15	22. 51	·1366					
13. 33	27. 40	23. 25	·1363					
14. 1	32. 0	23. 59	·1364					
14. 11	32. 40							
14. 44	27. 50							
14. 54	28. 0							
15. 33:	26. 0							
15. 49	26. 50							
16. 13	26. 50							
16. 23	26. 20							
16. 40	26. 20							
17. 35	27. 55							
17. 43	27. 30							
17. 51	28. 0							
18. 9	27. 25							
18. 16	28. 15							
18. 23	27. 40							
18. 29	27. 40							
18. 53	27. 0							
19. 21	27. 30							
19. 30	26. 30							
19. 38	27. 5							
19. 59	26. 20							
20. 22	27. 10							
20. 30	29. 10							
20. 38	27. 25							
20. 55	28. 30							
21. 3	27. 50							
21. 13	29. 5							
21. 41	29. 30							
23. 42	34. 20							
23. 55	34. 20							
23. 59	34. 45							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.21		Apr.21		Apr.21		Apr.21		
h m	° ′ ″	h m		h m		h m		
0. 0	20. 34. 45	0. 0	·1364	0. 0	·03464	1. 0	58 ·9	59 ·0
0. 21	34. 30	1. 20	·1364	5. 12	·03535	3. 0	58 ·8	59 ·4
2. 1	35. 50	1. 57	·1368	13. 26	·03543	9. 0	58 ·8	59 ·0
2. 12	35. 25	2. 19	·1366	17. 18	·03535	21. 30	58 ·8	58 ·9
2. 33	34. 45	2. 41	·1367	22. 56	·03496			
2. 49	35. 0	2. 59	·1374	23. 59	·03485			
4. 43	33. 25	3. 41	·1370					
4. 55	33. 0	4. 55	·1382					
6. 23	31. 20	5. 14	·1374					
7. 0	31. 15	6. 15	·1378					
7. 35	31. 35	7. 14	·1376					
7. 42	31. 20	7. 25	·1379					
8. 11	31. 55	8. 26	·1374					
8. 22	31. 25	8. 59	·1385					
8. 34	32. 50	9. 25	·1377					
8. 52	31. 15	9. 56	·1372					
9. 16	29. 55	10. 24	·1370					
9. 36	29. 40	14. 44	·1368					
9. 53:	28. 40	17. 6	·1366					
10. 25	30. 40	17. 54	·1370					
10. 55	31. 45	18. 27	·1365					
11. 13	31. 5	19. 13	·1367					
11. 28	31. 15	19. 29	·1362					
11. 56	31. 5	19. 57	·1365					
12. 10	31. 10	22. 49	·1354					
12. 55	30. 40	22. 57	·1357					
13. 44	30. 40	23. 26	·1355					
14. 9	30. 10	23. 59	·1356					
14. 25	30. 20							
14. 41	29. 45							
15. 38	29. 10							
16. 24	29. 10							
16. 39:	30. 5							
16. 57	29. 0							
17. 46	27. 25							
18. 14	28. 10							
18. 44	27. 5							
18. 50	27. 30							
19. 13	26. 50							
19. 23	27. 0							
19. 43	26. 10							
20. 13	26. 10							
22. 4	29. 20							
22. 17	30. 0							
22. 38	30. 10							
22. 42	31. 35							
23. 29	33. 45							
23. 59	35. 40							
Apr.22		Apr.22		Apr.22		Apr.22		
0. 0	20. 35. 40	0. 0	·1356	0. 0	·03485	0. 0	59 ·4	59 ·7
0. 29	35. 55	0. 31	·1362	6. 56	·03536	9. 0	58 ·5	59 ·0
1. 7	38. 10	0. 54	·1360	9. 12	·03507	21. 0	57 ·8	57 ·2
2. 0	37. 40	1. 12	·1367	16. 9	·03505			
2. 25	36. 55	3. 37	·1380	19. 58	·03481			
5. 39	34. 50	4. 25	·1381	20. 40	·03457			
6. 4	33. 40	4. 55	·1385	23. 32	·03440			
6. 33	30. 30	5. 29	·1387	23. 59	·03438			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr. 22		Apr. 22						
h m	° ′ ″	h m		h m		h m	°	°
6. 55	20. 30. 15	6. 3	·1382					
7. 13	32. 50	6. 27	·1376					
7. 21	32. 20	7. 20	·1386					
7. 36	33. 0		***					
7. 54	33. 10	8. 14	·1388					
8. 39	32. 5	8. 23	·1381					
9. 53	32. 0	8. 38	·1384					
11. 12	29. 50	8. 50	·1381					
11. 25	30. 20	8. 57	·1385					
11. 55	30. 25	9. 11	·1378					
12. 25	31. 20	9. 23	·1384					
13. 38	30. 20	9. 41	·1382					
13. 46	30. 45	9. 50	·1384					
14. 5	30. 0	10. 41	·1375					
14. 12	30. 25	10. 56	·1376					
14. 20	30. 20	11. 11	·1380					
14. 31	29. 40	11. 52	·1377					
14. 47	29. 50	12. 25	·1371					
14. 58	30. 20	12. 41	·1373					
15. 11	29. 40	14. 44	·1370					
15. 23	30. 5	15. 41	·1371					
15. 29	29. 45	15. 57	·1368					
15. 42	29. 40	17. 40	·1369					
15. 53	30. 5	18. 36	·1373					
16. 3	29. 55	19. 5	·1371					
16. 18	30. 5	19. 20	·1361					
16. 36	29. 25	19. 40	·1363					
17. 28	27. 50	20. 12	·1359					
17. 33	28. 35	20. 38	·1357					
17. 41	27. 10	21. 11	·1360					
17. 47	27. 50	22. 29	·1357					
18. 5	26. 40	23. 41	·1358					
18. 11	26. 40	23. 59	·1362					
18. 19	25. 15							
18. 28	27. 0							
18. 34	26. 25							
18. 42	27. 50							
19. 3	26. 10							
19. 12	27. 30							
19. 23	27. 20							
19. 39	30. 15							
19. 52	30. 20							
20. 6	31. 20							
20. 48	32. 50							
21. 15	32. 20							
21. 39	32. 55							
	***							
22. 8	32. 10							
	***							
23. 9	34. 10							
23. 43	34. 35							
23. 53	35. 40							
23. 59	35. 55							
Apr. 23		Apr. 23		Apr. 23		Apr. 23		
0. 0	20. 35. 55	0. 0	·1362	0. 0	·03438	1. 0	58·9	59·1
1. 20	35. 40	0. 46	·1365	2. 41	·03493	3. 0	59·3	59·0
3. 41	32. 15	2. 30	·1368	5. 8	·03523	9. 0	58·8	58·2
5. 45	20. 30. 5	3. 41	·1366	6. 41	·03520	21. 0	58·3	58·
6. 43	30. 0	6. 19	·1370	11. 24	·03500			
9. 53	31. 55	6. 49	·1369	17. 44	·03480			
10. 24	31. 55	9. 13	·1371	23. 59	·03446			
10. 38	31. 20	11. 44	·1370					
11. 18	31. 25	18. 42	·1367					
11. 39	30. 55	21. 26	·1364					
12. 35	31. 45	22. 22	·1358					
13. 14	31. 5	23. 12	·1357					
13. 30	31. 40	23. 59	·1364					
13. 54	30. 55							
16. 23	29. 20							
16. 59	28. 15							
18. 16	27. 55							
18. 29	27. 20							
18. 47	27. 45							
18. 59	27. 20							
	***							
20. 4	27. 20							
20. 13	27. 50							
20. 21	27. 20							
21. 13	29. 20							
22. 26	32. 55							
23. 59	35. 25							
Apr. 24		Apr. 24		Apr. 24		Apr. 24		
0. 0	20. 35. 25	0. 0	·1364	0. 0	·03446	1. 0	58·6	59·
0. 23	35. 40	0. 50	·1370	1. 43	·03450	3. 0	58·3	59·
0. 39	36. 50	1. 47	·1366	2. 17	·03462	9. 0	58·2	59·1
1. 51	34. 45	2. 16	·1375	5. 41	·03484	11. 0	58·4	58·
2. 9	34. 30	2. 50	·1370	9. 50	·03470	21. 0	58·3	58·
3. 29	32. 45	2. 57	·1372	15. 25	·03473	22. 0	58·1	58·
4. 39	32. 5	3. 29	·1371	19. 59	·03476	23. 0	58·8	59·
5. 14	31. 10	3. 56	·1377	22. 3	·03450			
5. 52	31. 30	4. 44	·1376	23. 59	·03444			
6. 5	31. 10	4. 57	·1372					
6. 43	31. 25	5. 49	·1380					
6. 53	32. 5	6. 11	·1381					
7. 38	31. 10	6. 41	·1377					
8. 59	31. 40	7. 14	·1383					
10. 26	31. 20	7. 25	·1378					
11. 0	31. 30	8. 20	·1380					
11. 14	31. 0	8. 42	·1376					
13. 11	31. 25	8. 59	·1379					
13. 41	30. 25	9. 14	·1374					
14. 0	30. 55	11. 11	·1378					
14. 27	30. 20	11. 18	·1375					
14. 56	30. 35	14. 29	·1373					
15. 21	30. 15	15. 23	·1370					
15. 39	31. 20	15. 54	·1373					
15. 56	30. 0	17. 19	·1368					
16. 10	29. 55	21. 14	·1365					
16. 39	28. 30	22. 30	·1361					
	***	23. 26	·1364					
17. 13	28. 40	23. 59	·1369					
	***							
17. 47	27. 50							
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr.24								
h m	° ′ ″	h m		h m		h m	°	
18. 8	20. 28. 5							
	***							
18. 51	27. 10							
19. 26	26. 50							
	***							
20. 39	27. 25							
21. 32	29. 5							
23. 16	33. 5							
23. 25	33. 10							
23. 59	34. 30							
Apr.25		Apr.25		Apr.25		Apr.25		
0. 0	20. 34. 30	0. 0	·1369	0. 0	·03444	0. 0	58·8	59·3
1. 16	36. 30	0. 13	·1373	2. 34	·03464	1. 0	58·9	59·6
1. 54	36. 25	1. 0	·1376	2. 43	·03480	2. 0	58·8	59·6
1. 59	37. 15	1. 25	·1376	3. 9	·03470	3. 0	59·0	59·9
2. 11	36. 40	2. 11	·1385	3. 12	·03479	9. 0	58·9	59·9
2. 26	36. 5	2. 27	·1381	3. 19	·03471	21. 0	61·1	62·0
2. 33	37. 0	2. 42	·1388	3. 55	·03482	22. 0	60·8	62·2
2. 57	36. 0	3. 9	·1382	5. 24	·03505	23. 0	60·3	61·8
3. 3	36. 20	3. 22	·1374	5. 28	·03490			
3. 10	35. 0	3. 36	·1370	5. 45	·03516			
3. 25	34. 30	3. 51	·1371	10. 17	·03514			
3. 43	34. 45	4. 5	·1377	12. 53	·03566			
3. 55	35. 30	4. 24	·1375	13. 18	·03563			
4. 18	34. 5	4. 35	·1379	14. 8	·03580			
4. 26	34. 30	4. 55	·1368	16. 41	·03617			
4. 39	34. 0	5. 14	·1377	21. 10	·03625			
5. 13	35. 40	5. 25	·1366	23. 59	·03598			
5. 24	34. 15	5. 42	·1379					
5. 26	34. 30	5. 56	·1374					
	***	6. 27	·1367					
5. 54	31. 40	7. 32	·1377					
6. 4	32. 25	8. 14	·1380					
6. 9	32. 10	8. 42	·1371					
6. 17	32. 40	9. 15	·1374					
6. 28	32. 20	10. 42	·1372					
6. 38	32. 40	12. 41	·1366					
6. 50	31. 40	13. 11	·1373					
7. 43	32. 0	14. 12	·1364					
8. 17	31. 0	16. 52	·1362					
10. 23	31. 30	17. 11	·1364					
10. 54	30. 55	19. 29	·1364					
12. 28	31. 0	21. 22	·1353					
12. 40	32. 45	22. 9	·1351					
12. 49	32. 40	22. 25	·1356					
12. 53	30. 50	23. 8	·1354					
13. 15	29. 5	23. 59	·1359					
13. 28	28. 50							
13. 51	30. 0							
14. 39	30. 10							
15. 42	29. 30							
17. 34	29. 10							
17. 38	28. 30							
17. 45	28. 25							
17. 53	28. 55							
17. 58	28. 20							
18. 21	28. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Apr.25								
h m	° ′ ″	h m		h m		h m	°	°
18. 42	20. 29. 10							
18. 59	28. 40							
19. 14	27. 25							
19. 31	28. 20							
19. 56	28. 10							
20. 14	28. 50							
20. 33	28. 10							
21. 35	29. 5							
21. 43	29. 50							
22. 0	29. 30							
22. 26	31. 0							
23. 9	32. 5							
23. 28	33. 50							
23. 59	34. 30							
Apr.26		Apr.26		Apr.26		Apr.26		
0. 0	20. 34. 30	0. 0	·1359	0. 0	·03598	0. 0	60·8	62·2
0. 11	34. 30	0. 24	·1363	2. 57	·03615	1. 0	60·4	62·0
0. 18	35. 20	0. 41	·1367	6. 42	·03647	3. 0	60·5	61·0
0. 28	35. 40	1. 11	·1366	7. 6	·03630	9. 0	60·4	61·0
0. 36	36. 55	2. 42	·1371	7. 24	·03644	21. 0	59·6	60·0
1. 1	36. 30	3. 6	·1368	8. 29	·03646			
1. 24	36. 45	3. 26	·1373	9. 20	·03634			
2. 15	35. 35	4. 24	·1370	10. 38	·03634			
3. 25	33. 40	5. 41	·1370	12. 40	·03571			
3. 34	32. 55	6. 11	·1379	13. 18	·03580			
3. 51	33. 0	6. 25	·1384	16. 41	·03599			
4. 53	31. 55	6. 37	·1380	19. 41	·03596			
5. 0	32. 10	6. 42	·1382	23. 59	·03547			
5. 36	31. 30	6. 58	·1372					
5. 54	30. 20	7. 26	·1382					
6. 39	30. 40	8. 0	·1369					
7. 12	32. 20	9. 20	·1377					
7. 26	30. 45	9. 24	·1372					
7. 43	30. 40	9. 41	·1374					
8. 6:	29. 30	9. 57	·1369					
8. 26	31. 45	10. 26	·1374					
8. 43	31. 15	10. 52	·1372					
8. 57	29. 35	11. 11	·1379					
9. 29	28. 40	11. 24	·1381					
9. 36	29. 55	11. 41	·1377					
9. 58	29. 50	12. 19	·1399					
10. 23	31. 0	12. 56	·1374					
10. 44	30. 40	13. 22	·1368					
10. 57	31. 15	13. 41	·1371					
11. 9	30. 20	14. 12	·1366					
11. 17	30. 10	15. 43	·1368					
11. 32	28. 0	19. 36	·1363					
11. 42	28. 20	20. 25	·1356					
12. 0	26. 0	22. 41	·1355					
12. 18	28. 55	23. 11	·1358					
12. 29	26. 50	23. 59	·1366					
12. 48	24. 50							
13. 9	24. 35							
13. 27	26. 50							
14. 54	29. 25							
15. 45	28. 45							
16. 8	29. 10							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr.26								
h m	° ′ ″	h m		h m		h m	°	°
16. 25	20. 28. 25							
17. 0	28. 5							
18. 22	27. 30							
18. 26	26. 55							
18. 30	27. 25							
18. 39	27. 55							
19. 6	26. 50							
19. 31	27. 55							
20. 2	27. 55							
21. 57	31. 30							
23. 41	37. 15							
23. 48	36. 50							
23. 59	37. 35							
Apr.27		Apr.27		Apr.27		Apr.27		
0. 0	20. 37. 35	0. 0	·1366	0. 0	·03547	1. 0	60·2	61·3
0. 55	38. 10	0. 59	·1370	6. 40	·03640	3. 0	60·1	61·8
1. 21	36. 15	1. 12	·1365	14. 26	·03629	9. 0	60·8	61·6
1. 27	36. 45	1. 26	·1370		(†)	21. 0	60·1	60·9
1. 43	36. 10	2. 12	·1373	23. 43	·03548			
2. 16	36. 10	2. 25	·1367	23. 59	·03552			
2. 26	35. 0	3. 8	·1372					
2. 38	35. 30	3. 12	·1378					
2. 41	35. 10	3. 33	·1360					
2. 56	35. 55	5. 11	·1376					
3. 8	35. 30	5. 36	·1374					
3. 11	36. 5	5. 55	·1378					
3. 26	35. 0	6. 22	·1371					
5. 42	31. 55	9. 11	·1372					
6. 13	32. 0	13. 3	·1370					
6. 52	30. 40	17. 40	·1370					
7. 3	30. 40		(†)					
7. 22	29. 50	21. 0	·1361*					
7. 54	30. 10	23. 59	·1362					
8. 15	29. 55							
8. 38	30. 20							
10. 30	31. 15							
13. 27	30. 45							
16. 6	30. 5							
18. 9	28. 20							
18. 23	28. 35							
19. 19	27. 50							
19. 30	28. 10							
19. 51	27. 30							
20. 30	27. 20							
22. 23	29. 40							
23. 46	33. 30							
23. 59	33. 45							
Apr.28		Apr.28		Apr.28		Apr.28		
0. 0	20. 33. 45	0. 0	·1362	0. 0	·03552	1. 0	60·2	61·0
0. 58	34. 45	1. 4	·1366	1. 21	·03583	3. 0	60·4	61·8
1. 27	34. 25	1. 25	·1364	3. 12	·03590	9. 0	60·1	61·2
	(†)		(†)	5. 55	·03636	22. 0	58·0	57·3
2. 49	33. 10	2. 54	·1372	9. 34	·03623			
4. 9	32. 30	6. 0	·1375	13. 39	·03587			
5. 29	31. 15	9. 11	·1370	20. 23	·03526			
6. 39	30. 55	13. 6	·1373	23. 26	·03456			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet	Of V. F. Magnet.
Apr.28		Apr.28		Apr.28				
h m	° ′ ″	h m		h m		h m	°	°
6. 53	20. 31. 5	15. 33	·1367	23. 59	·03453			
6. 58	30. 30	16. 26	·1373					
7. 13	31. 10	17. 20	·1369					
7. 41	30. 20	19. 20	·1367					
8. 19	31. 15	22. 12	·1358					
8. 25	31. 0	23. 59	·1363					
10. 3	31. 15							
10. 30	30. 55							
11. 24	31. 30							
13. 16	31. 20							
14. 9	30. 35							
14. 23	30. 45							
15. 17	30. 0							
15. 39	30. 0							
15. 53	31. 0							
16. 19	30. 20							
16. 31	29. 45							
17. 9	28. 45							
19. 26	26. 45							
20. 10	26. 40							
20. 56	27. 5							
22. 14	30. 40							
22. 56	33. 5							
23. 8	34. 10							
23. 59	35. 5							
Apr.29		Apr.29		Apr.29		Apr.29		
0. 0	20. 35. 5	0. 0	·1363	0. 0	·03453	1. 0	57·9	57·2
1. 9	36. 0	0. 50	·1364	1. 51	·03456	9. 0	58·6	58·0
1. 17	35. 40	1. 14	·1360	4. 45	·03480	19. 30	57·6	57·1
1. 29	36. 10	1. 29	·1364	10. 53	·03477	21. 0	57·6	57·8
1. 43	35. 20	1. 47	·1361	13. 42	·03459			
2. 11	35. 10	2. 14	·1367	13. 46	·03464			
3. 26	33. 40	3. 50	·1372	13. 55	·03467			
4. 29	33. 10	6. 11	·1376	14. 24	·03438			
6. 13	31. 40	9. 14	·1377	15. 20	·03443			
6. 46	31. 55	11. 0	·1376	19. 41	·03424			
7. 21	31. 35	12. 3	·1382	23. 59	·03367			
7. 41	31. 40	12. 12	·1378					
8. 25	30. 20	12. 20	·1381					
8. 59	30. 25	12. 33	·1378					
9. 30	30. 0	13. 4	·1382					
10. 13	30. 55	13. 13	·1378					
11. 32	30. 5	13. 22	·1382					
11. 58	30. 25	13. 51	·1376					
12. 9	29. 40	13. 58	·1382					
	* * *	14. 0	·1377					
12. 44	30. 40	14. 14:	·1388					
13. 4	29. 20	14. 43	·1376					
13. 41	29. 45	15. 20:	·1368					
13. 48	33. 20	16. 22	·1372					
13. 52	32. 55	17. 24	·1371					
13. 58	33. 55	17. 51	·1376					
14. 14	29. 30	18. 41	·1369					
14. 34	26. 40		* * *					
14. 41	26. 20	19. 55	·1372					
14. 50	27. 0	21. 11	·1363					
15. 0	26. 25	21. 42	·1365					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

April 27. The Horizontal Force trace was lost after 17^h. 40^m, and the Vertical Force trace after 14^h. 26^m, owing to a failure of gas.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 29		Apr. 29						
h m	° ′ ″	h m		h m		h m	°	°
15. 24	20. 28. 40	22. 24	·1361					
15. 42	28. 50	23. 12	·1364					
16. 12	27. 30	23. 43	·1370					
16. 58	27. 0	23. 59	·1376					
17. 8	27. 30							
17. 18	26. 55							
17. 32	26. 55							
	***							
18. 1	28. 10							
	***							
18. 42	27. 10							
18. 48	27. 40							
19. 13	27. 55							
19. 20	27. 20							
19. 34	27. 30							
19. 53	26. 25							
20. 8	26. 50							
20. 12	26. 5							
21. 30	27. 20							
	***							
23. 9	31. 50							
	***							
23. 51	33. 0							
23. 59	34. 20							
Apr. 30		Apr. 30		Apr. 30		Apr. 30		
0. 0	20. 34. 20	0. 0	·1376	0. 0	·03367	1. 0	58 ·2	58 ·1
0. 23	35. 40	0. 25	·1380	0. 38	·03370	9. 0	59 ·3	59 ·8
0. 53	35. 40	1. 4	·1372	2. 11	·03414	21. 0	58 ·9	59 ·4
0. 56	35. 10	1. 19	·1377	2. 22	·03403			
1. 20	36. 40	1. 31	·1375	3. 12	·03417			
1. 26	36. 5	2. 6	·1379	3. 43	·03420			
1. 58	36. 50	2. 26	·1372	5. 46	·03478			
2. 14	35. 5	2. 40	·1370	5. 55	·03472			
2. 21	35. 25	2. 54	·1373	6. 25	·03497			
2. 44	35. 0	3. 10	·1382	10. 0	·03500			
2. 57	36. 5	3. 29	·1375	13. 41	·03487			
3. 9	35. 40	3. 41	·1366	14. 19	·03470			
3. 39	34. 20	3. 58	·1366	16. 41	·03498			
4. 20	33. 50	4. 15	·1377	20. 13	·03479			
4. 53	34. 5	4. 42	·1376	22. 57	·03440			
5. 39	31. 0	5. 0	·1383	23. 59	·03440			
6. 6	27. 0	5. 19	·1384					
6. 20	27. 30	5. 28	·1377					
6. 29	28. 55	5. 54	·1370					
6. 41	28. 30	6. 12	·1380					
7. 0	29. 20	6. 36	·1376					
7. 15	29. 10	6. 43	·1371					
7. 28	30. 5	6. 56	·1375					
8. 1	30. 0	7. 20	·1371					
8. 28	30. 40	7. 41	·1375					
9. 11	29. 40	7. 56	·1370					
9. 26	28. 5	8. 41	·1372					
9. 43	29. 5	9. 54	·1367					
	***	10. 40	·1372					
10. 26	28. 20	11. 13	·1365					
10. 44	28. 40	11. 28	·1369					
11. 7	27. 5	12. 20	·1366					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Apr. 30		Apr. 30						
h m	° ′ ″	h m		h m		h m	°	°
11. 23	20. 28. 5	12. 43	·1370					
11. 44	27. 25	13. 8	·1370					
12. 45	29. 5	13. 24	·1363					
12. 58:	30. 20	14. 5	·1367					
13. 9	29. 40	15. 9	·1363					
13. 39	32. 40	15. 12	·1369					
13. 53	31. 50	15. 26	·1364					
14. 14	29. 40	15. 43	·1367					
14. 56	29. 50	16. 12	·1363					
15. 6	29. 20	19. 36	·1363					
15. 12	30. 0	21. 5	·1356					
15. 35	28. 0	21. 14	·1358					
15. 43	28. 20	22. 31	·1354					
16. 8	26. 55	23. 59	·1360					
16. 36	29. 0							
16. 50	28. 20							
16. 56	28. 55							
	***							
18. 6	28. 30							
18. 16	27. 45							
18. 25	28. 10							
18. 32	27. 40							
	***							
19. 50	27. 40							
20. 51	28. 40							
21. 25	29. 5							
22. 18	30. 40							
22. 32	31. 50							
22. 42	31. 35							
22. 51	32. 10							
22. 56	32. 5							
23. 53	34. 30							
23. 59	34. 30							
May 1		May 1		May 1		May 1		
0. 0	20. 34. 30	0. 0	·1360	0. 0	·03440	1. 0	59 ·9	60 ·7
0. 45	34. 55	0. 26	·1365	0. 40	·03445	3. 0	59 ·6	60 ·7
1. 21	35. 25	0. 51	·1367	4. 55	·03545	9. 0	58 ·5	59 ·0
1. 33	36. 50	1. 10	·1374	5. 12	·03530	21. 0	57 ·8	59 ·0
2. 26:	35. 55	1. 15	·1372	5. 41	·03564	22. 0	57 ·8	58 ·0
3. 30	36. 55	1. 40	·1378	6. 41	·03525	23. 0	57 ·8	58 ·1
3. 43	36. 10	1. 58	·1373	6. 45	·03527			
4. 54	37. 0	2. 33	·1371	8. 15	·03503			
5. 12	31. 20	3. 26	·1376	8. 55	·03512			
5. 30	26. 10	3. 47	·1371	10. 7	·03488			
6. 0	32. 35	4. 9	·1376	10. 56	·03493			
6. 27	33. 25	4. 56	·1380	11. 57	·03476			
6. 38	31. 50	5. 12	·1362	12. 26	·03482			
6. 44	33. 30	5. 28	·1374	14. 14	·03477			
7. 0	32. 30	5. 38	·1386	14. 55	·03440			
7. 16	32. 30	5. 54	·1390	15. 55	·03463			
7. 33	32. 55	6. 12	·1376	16. 56	·03478			
7. 40	31. 40	6. 24	·1378	19. 23	·03472			
7. 45	31. 15	6. 42	·1357	21. 28	·03433			
7. 56	31. 30	7. 12	·1368	21. 43	·03446			
8. 7	30. 30	7. 42	·1376	23. 59	·03403			
8. 30	22. 45	8. 0	·1371					
8. 56	26. 30	8. 19	·1356					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 1		May 1						
h m	° ′ ″	h m		h m		h m	°	°
9. 42	20. 28. 55	8. 41	·1362					
9. 56	28. 30	8. 56	·1365					
10. 12	27. 20	9. 20	·1359					
10. 29	26. 40	9. 40	·1363					
10. 56	27. 30	10. 12	·1359					
11. 16	23. 50	10. 50	·1359					
11. 43	21. 40	11. 0	·1363					
11. 56	21. 20	11. 12	·1362					
12. 48	24. 0	11. 19	·1367					
12. 59	24. 0	11. 26	·1364					
13. 34	26. 40	11. 44	·1370					
13. 44	26. 40	12. 14	·1357					
14. 21	37. 30	12. 36	·1360					
15. 0	27. 0	12. 51	·1363					
15. 14	25. 45	13. 14	·1363					
15. 58	28. 10	13. 41	·1366					
16. 25	27. 35	14. 10	·1360					
17. 3	28. 15	14. 24	·1372					
17. 23	27. 20	14. 41	·1381					
17. 30	27. 20	15. 54	·1365					
17. 45	27. 55	16. 12	·1367					
17. 57	26. 30	16. 35	·1364					
18. 18	27. 10	17. 17	·1366					
18. 23	26. 50	17. 42	·1367					
	***	18. 10	·1364					
19. 6	26. 0	19. 35	·1365					
20. 4	26. 45	20. 54	·1358					
20. 30	27. 45	21. 4	·1359					
20. 41	27. 20	21. 55	·1348					
21. 33	29. 20	22. 40	·1353					
21. 39	30. 20	23. 14	·1360					
21. 54	30. 10	23. 25	·1365					
	***	23. 50	·1362					
22. 46	31. 55	23. 59	·1354					
23. 23	35. 20							
23. 44	36. 5							
23. 55	35. 0							
23. 59	35. 0							
May 2		May 2		May 2		May 2		
0. 0	20. 35. 0	0. 0	·1354	0. 0	·03403	0. 0	57·7	57·2
0. 10	35. 40	0. 22	·1369	0. 39	·03404	1. 0	58·3	59·0
0. 45	38. 55	0. 55	·1366	2. 8	·03437	3. 0	58·3	59·0
0. 49	38. 35	1. 12	·1372	2. 41	·03437	9. 0	58·9	60·5
1. 9	39. 40	1. 29	·1364	5. 34	·03500	21. 0	58·8	59·3
1. 26	37. 50	1. 57	·1367	6. 4	·03497	22. 0	58·9	59·1
1. 57	37. 10	2. 15	·1374	8. 54	·03518	23. 0	59·3	59·6
2. 11	37. 40	2. 41	·1375	10. 25	·03516			
2. 45	35. 0	2. 56	·1371	10. 56	·03500			
2. 53	35. 10	3. 12	·1378	11. 11	·03500			
3. 26	34. 20	3. 29	·1376	11. 42	·03486			
4. 10	33. 40	4. 55	·1382	11. 55	·03500			
4. 49	33. 5	5. 21	·1373	12. 36	·03463			
5. 19	31. 30	5. 41	·1380	13. 25	·03477			
5. 52	31. 30	5. 50	·1375	15. 11	·03463			
6. 20	29. 25	6. 11	·1370	15. 41	·03442			
7. 22	29. 45	6. 25	·1372	17. 40	·03420			
7. 30	29. 0	6. 40	·1376	20. 9	·03441			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 2		May 2		May 2				
h m	° ′ ″	h m		h m		h m	°	°
7. 42	20. 28. 55	7. 12	·1374	20. 40	·03437			
7. 53	27. 45	7. 22	·1377	23. 59	·03486			
8. 11	28. 25	7. 36	·1374					
8. 28	28. 25	7. 57	·1370					
8. 47	26. 30	8. 12	·1374					
9. 14	27. 5	8. 26	·1373					
9. 39	28. 0	8. 43	·1366					
9. 51	28. 0	9. 15	·1368					
10. 8	29. 0	9. 28	·1370					
10. 19	30. 10	9. 55	·1364					
10. 33	30. 10	10. 12	·1367					
10. 55	28. 0	10. 35	·1378					
11. 25	29. 45	11. 15	·1374					
	***	11. 30	·1376					
11. 48	29. 30	11. 55	·1364					
11. 56	31. 35	12. 6	·1375					
12. 4	32. 55	12. 25	·1390					
12. 49	27. 50	13. 6	·1374					
13. 7	26. 25	13. 13	·1377					
13. 16	27. 30	13. 22	·1375					
13. 34	27. 55	13. 35	·1375					
13. 43	27. 20	14. 19	·1382					
13. 57	29. 0	14. 42	·1380					
14. 43:	28. 5	15. 15	·1386					
15. 12	30. 25	15. 39	·1383					
16. 15	30. 45	15. 42	·1380					
16. 25	29. 30	15. 57	·1376					
16. 53	27. 25	16. 11	·1379					
	***	16. 23	·1376					
17. 15	27. 45	16. 39	·1378					
17. 34	25. 25	16. 56	·1376					
18. 2	26. 30	17. 13	·1379					
18. 36	25. 20	17. 18	·1378					
18. 43	26. 30	17. 27	·1380					
18. 56	26. 35	17. 34	·1380					
19. 13	25. 15	18. 5	·1371					
19. 32	26. 50	18. 15	·1374					
20. 13	28. 20	18. 41	·1371					
20. 38:	28. 10	19. 43	·1359					
20. 50	30. 10	19. 57	·1362					
21. 11	30. 55	20. 45	·1353					
21. 18	30. 20	21. 24	·1350					
21. 27	30. 20	22. 6	·1353					
21. 38	29. 20	22. 20	·1351					
21. 47	29. 40	22. 24	·1354					
22. 9	33. 0	22. 41	·1344					
22. 12	33. 10	23. 12	·1350					
22. 20	34. 50	23. 13	·1356					
22. 26	34. 50	23. 38	·1369					
22. 39	33. 25	23. 50	·1354					
22. 53	33. 0	23. 55	·1356					
22. 57	33. 30	23. 59	·1352					
23. 21	35. 0							
23. 30	36. 45							
23. 47	36. 45							
23. 55	38. 10							
23. 59	38. 10							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
May 3	
h m	° ′ ″
0. 0	20. 38. 10
0. 23	40. 55
0. 42	40. 5
0. 53	40. 10
1. 47	38. 35
2. 6	39. 5
2. 23	38. 35
2. 40	38. 40
2. 48	39. 35
2. 58	39. 5
3. 11	39. 15
3. 24	38. 25
3. 39	39. 10
3. 54	38. 20
4. 3	39. 10
4. 12	38. 45
4. 26	38. 35
4. 52	35. 30
5. 20	36. 50
5. 40	35. 10
6. 8	30. 50
6. 43	29. 45
6. 46	30. 5
7. 7	29. 40
7. 16	30. 25
7. 39	29. 20
7. 43	29. 40
7. 54	26. 10
8. 7	25. 25
8. 15	26. 50
8. 21	26. 25
8. 38	26. 50
8. 49	25. 0
8. 58	25. 25
9. 5	24. 30
9. 28	27. 5
9. 32	26. 15
9. 50	25. 10
10. 9	22. 0
10. 34	25. 45
10. 42	26. 25
10. 58	26. 0
11. 10	24. 35
11. 38⁚	27. 45
11. 51	25. 20
12. 13	26. 15
12. 43	26. 40
12. 53	27. 10
13. 8⁚	21. 45
13. 20	21. 10
13. 26	23. 5
13. 38	24. 20
13. 51	28. 5
14. 7⁚	29. 0
14. 36	25. 25
14. 45	25. 35
14. 48	25. 30
15. 4	26. 30
15. 21	20. 25. 55
15. 26	27. 5
15. 53	26. 30
15. 58	27. 25
16. 8	26. 30
16. 22	26. 25
16. 30	27. 50
16. 37	25. 25
16. 49	24. 10
17. 8	25. 25
17. 21	25. 25
	***
18. 8	29. 50
18. 16	28. 50
18. 21	28. 55
18. 35	27. 25
18. 44	30. 0
18. 50	30. 25
19. 12	29. 45
19. 23	30. 10
19. 56	28. 50
20. 4	29. 25
20. 15	29. 25
20. 20	28. 10
20. 27	29. 10
20. 33	28. 40
21. 7	29. 10
21. 13	30. 10
	***
21. 50	29. 40
21. 56	30. 20
22. 14	30. 0
22. 37	32. 5
22. 56	31. 20
23. 24	33. 55
23. 51	33. 55
23. 59	34. 55
May 4	
0. 0	20. 34. 55
0. 6	35. 10
0. 21	34. 40
0. 38	35. 35
1. 37	34. 55
1. 41	36. 10
2. 2	36. 25
2. 11	35. 20
2. 56	34. 10
3. 13	34. 50
3. 56	33. 35
4. 36	33. 30
6. 33	31. 20
6. 43	31. 40
7. 9	30. 40
7. 14	31. 0
7. 24	33. 5
7. 27	33. 30
7. 41	31. 20

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
May 3	
h m	
0. 0	·1352
0. 5	·1348
0. 10	·1351
0. 18	·1349
0. 25	·1350
0. 40	·1345
1. 4	·1356
1. 39	·1356
1. 55	·1360
2. 11	·1367
2. 34	·1366
2. 50	·1375
3. 0	·1375
3. 12	·1370
3. 18	·1362
3. 47	·1382
3. 54	·1379
4. 11	·1385
4. 17	·1383
4. 23	·1374
4. 33	·1373
4. 47	·1375
5. 4	·1379
5. 18	·1379
5. 33	·1367
5. 37	·1368
5. 50	·1366
6. 12	·1379
6. 33	·1382
6. 54	·1378
7. 16	·1382
7. 34	·1372
7. 54	·1362
8. 12	·1368
8. 25	·1367
8. 43	·1358
9. 5	·1366
9. 16	·1369
9. 42	·1372
10. 19	·1356
10. 53	·1365
11. 12	·1363
11. 26	·1370
11. 54	·1361
12. 12	·1364
12. 21	·1362
12. 57	·1372
13. 18	·1383
13. 25	·1380
13. 55	·1388
14. 16	·1381
14. 47	·1368
15. 20	·1374
16. 0	·1364
16. 41	·1369
16. 53	·1364
17. 13	·1368
17. 44	·1358
18. 15	·1356
18. 41	·1351
18. 59	·1356
19. 51	·1362
	***
21. 12	·1359
21. 37	·1350
22. 17	·1356
22. 40	·1363
22. 45	·1357
22. 56	·1356
23. 11	·1366
23. 36	·1357
23. 54	·1362
23. 59	·1358
May 4	
0. 0	·1358
0. 24	·1364
0. 58	·1366
1. 31	·1368
1. 43	·1375
1. 56	·1378
2. 12	·1369
2. 27	·1364
3. 20	·1376
3. 31	·1372
3. 43	·1367
4. 9	·1367
4. 39	·1375
4. 43	·1372
5. 22	·1381
6. 11	·1380
6. 34	·1373
6. 43	·1377
7. 9	·1374

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
May 3	
h m	
0. 0	·03486
2. 34	·03512
2. 54	·03525
3. 14	·03520
3. 37	·03540
4. 26	·03548
5. 11	·03557
5. 30	·03554
6. 14	·03576
8. 13	·03580
9. 3	·03563
10. 0	·03536
10. 40	·03543
11. 51	·03510
12. 58	·03497
13. 21	·03472
13. 42	·03478
14. 27	·03452
15. 34	·03456
16. 4	·03470
17. 56	·03466
18. 42	·03450
18. 55	·03459
23. 59	·03418
May 4	
0. 0	·03418
0. 52	·03438
1. 55	·03464
2. 8	·03460
5. 12	·03523
7. 0	·03545
7. 10	·03541
7. 23	·03547
7. 41	·03534
8. 19	·03538
9. 57	·03516
10. 14	·03532
10. 43	·03503
13. 19	·03500
13. 29	·03506
13. 58	·03460
14. 40	·03442
14. 54	·03425
15. 13	·03440

Greenwich Mean Solar Time.	Readings of Thermometers	
	Of H. F. Magnet.	Of V. F. Magnet.
May 3		
h m	°	°
0. 0	59 ·5	60 ·0
1. 0	59 ·5	59 ·7
3. 0	59 ·5	59 ·9
9. 0	59 ·4	59 ·2
21. 0	58 ·3	58 ·8
May 4		
1. 0	59 ·1	60 ·1
3. 0	59 ·4	60 ·6
9. 0	59 ·4	60 ·5
21. 0	57 ·5	59 ·1

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope, in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁚ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 4		May 4		May 4				
h m	° ′ ″	h m		h m		h m	°	°
8. 3:	20. 29. 5	7. 20	·1385	15. 38	·03421			
8. 12	30. 5	7. 55	·1373	16. 18	·03440			
8. 36	29. 40	8. 11	·1376	17. 41	·03456			
8. 55	29. 50	8. 20	·1372	18. 13	·03442			
9. 26	27. 20	8. 43	·1374	18. 22	·03444			
9. 35	28. 5	9. 25	·1375	21. 26	·03458			
9. 44	26. 15	9. 55	·1361	23. 59	·03422			
10. 12	19. 15	10. 20	·1384					
10. 25	22. 30	10. 45	·1369					
11. 12	26. 20	10. 59	·1371					
11. 31	28. 55	12. 20	·1368					
12. 6	29. 15	12. 41	·1374					
12. 22	28. 30	12. 57	·1374					
12. 30	29. 10	13. 12	·1370					
12. 39	28. 5	13. 27	·1372					
13. 2	26. 10	13. 44	·1386					
13. 12	27. 10	14. 12	·1380					
13. 39	37. 10	14. 43	·1384					
14. 9	30. 55	15. 10	·1355					
14. 35	28. 10	15. 30	·1358					
14. 52	27. 20	15. 50	·1367					
15. 4	28. 55	16. 12	·1371					
15. 15	31. 40	16. 25	·1367					
15. 40	26. 40	16. 40	·1372					
16. 6	25. 40	16. 51	·1370					
16. 14	24. 20	17. 22	·1362					
16. 19	24. 20	17. 51	·1361					
16. 26	25. 15	18. 39	·1342					
16. 39	24. 25	18. 59	·1352					
16. 44	24. 45	19. 56	·1362					
17. 12	24. 10		***					
17. 23	25. 50	22. 40	·1356					
17. 38	26. 0	22. 51	·1359					
17. 44	27. 10	23. 0	·1358					
17. 59	27. 20	23. 42	·1364					
18. 8	26. 15	23. 59	·1361					
18. 14	27. 55							
18. 31	27. 45							
18. 46	30. 25							
18. 58	30. 15							
19. 7	28. 55							
19. 11	29. 40							
19. 14	27. 15							
19. 17	28. 15							
19. 28	26. 55							
19. 54	27. 50							
20. 2	27. 10							
20. 46	28. 45							
20. 58	28. 5							
21. 24	29. 25							
22. 11	29. 35							
22. 23	30. 5							
22. 34	29. 45							
22. 42	30. 25							
23. 6	30. 30							
23. 38	33. 5							
23. 59	33. 10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 5		May 5		May 5		May 5		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 33. 10	0. 0	·1361	0. 0	·03422	1. 0	58·6	59·7
0. 18	34. 0	0. 12	·1358	2. 4	·03480	3. 0	58·9	59·9
	***	0. 21	·1360	2. 40	·03483	9. 0	59·7	61·6
0. 39	34. 15	0. 27	·1358	2. 56	·03508	22. 0	60·2	61·0
1. 3	35. 40	1. 10	·1365	5. 52	·03535			
1. 54	35. 40	1. 21	·1361	9. 26	·03552			
2. 13	36. 40	1. 44	·1364	10. 12	·03543			
2. 39	35. 30	2. 15	·1373	10. 40	·03528			
2. 54	36. 35	2. 38	·1371	14. 39	·03562			
3. 6	36. 5	2. 42	·1365	18. 15	·03557			
3. 14	36. 20	2. 47	·1370	20. 40	·03544			
3. 53	34. 55	2. 56	·1379	23. 59	·03521			
3. 59	35. 5	3. 11	·1370					
4. 48	33. 5	3. 28	·1368					
5. 9	33. 20	4. 7	·1378					
5. 15	32. 35	4. 26	·1374					
5. 52	31. 45	4. 52	·1376					
5. 59	32. 10	5. 10	·1380					
6. 41	31. 20	5. 14	·1375					
6. 45	31. 40	5. 47	·1377					
7. 0	30. 55	5. 56	·1382					
7. 12	31. 35	6. 13	·1378					
8. 11	31. 0	6. 29	·1381					
8. 30	29. 35	6. 44	·1379					
8. 42	30. 20	6. 59	·1373					
8. 52	30. 5	7. 11	·1376					
9. 12	27. 40	7. 26	·1372					
9. 42	31. 15	8. 11	·1371					
10. 6	30. 55	8. 39	·1376					
10. 12	28. 0	8. 56	·1370					
10. 26	30. 10	9. 12	·1375					
10. 43	29. 20	9. 36	·1378					
11. 4	30. 0	9. 55	·1374					
11. 39	28. 20	10. 13	·1393					
12. 20	30. 0	10. 44	·1377					
12. 43	29. 30	11. 12	·1376					
14. 7:	28. 40	11. 41	·1370					
14. 41	31. 15	14. 42	·1364					
15. 30	28. 45	15. 12	·1368					
15. 57	29. 35	15. 54	·1365					
17. 5	27. 20	16. 43	·1367					
17. 51	27. 0	19. 13	·1365					
18. 42	27. 30	19. 38	·1367					
19. 14	27. 10	21. 22	·1361					
19. 35	28. 10	23. 10	·1368					
19. 53	27. 25	23. 59	·1373					
	***							
20. 39	28. 50							
21. 38	29. 40							
23. 40	34. 15							
23. 59	34. 15							
May 6		May 6		May 6		May 6		
0. 0	20. 34. 15	0. 0	·1373	0. 0	·03521	1. 0	60·0	61·3
0. 59	34. 25	1. 6	·1372	1. 41	·03537	8. 0	59·6	61·4
2. 3	33. 0	1. 56	·1369	4. 26	·03576	21. 0	58·8	60·8
2. 23	33. 40	2. 20	·1373	6. 43	·03580			
2. 28	33. 0	2. 32	·1369	14. 25	·03560			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 6		May 6		May 6				
h m	° ′ ″	h m		h m		h m	°	°
4. 39	20. 33. 15	3. 20	·1374	15. 22	·03542			
7. 16	31. 50	4. 11	·1369	16. 28	·03553			
7. 28	32. 5	4. 49	·1371	18. 16	·03528			
7. 59	31. 40	5. 27	·1378	21. 10	·03520			
8. 43	31. 55	8. 10	·1380	23. 59	·03492			
9. 10	31. 15	9. 20	·1376					
9. 33	30. 0	9. 56	·1378					
9. 54	30. 55	10. 12	·1375					
10. 10	31. 0	10. 41	·1381					
10. 29	29. 50	11. 26	·1372					
10. 41	29. 50	11. 57	·1377					
10. 53	29. 10	12. 14	·1374					
11. 30	30. 55	12. 39	·1376					
11. 38	30. 35	12. 56	·1374					
11. 42	31. 5	13. 41	·1375					
12. 24	29. 55	14. 20	·1367					
13. 39	29. 50	15. 11	·1377					
13. 50	30. 15	15. 55	·1372					
14. 16	29. 20	16. 27	·1363					
14. 46	31. 50	17. 55	·1376					
14. 56	31. 20	19. 12	·1365					
15. 26	27. 50	20. 24	·1373					
15. 54	25. 30	22. 26	·1367					
16. 10	25. 40	23. 44	·1372					
16. 39	28. 25	23. 59	·1376					
17. 9	29. 40							
18. 0	29. 30							
18. 11	28. 30							
18. 15	28. 45							
18. 25	27. 30							
18. 40	27. 25							
18. 45	26. 55							
18. 53	27. 40							
19. 16	27. 40							
20. 8	28. 30							
20. 19	29. 45							
21. 6	30. 35							
21. 39	31. 0							
22. 21	32. 5							
23. 5	32. 20							
23. 25	33. 20							
23. 59	33. 20							
May 7		May 7		May 7		May 7		
0. 0	20. 33. 20	0. 0	·1376	0. 0	·03492	1. 0	59·6	61·0
0. 20	33. 30	1. 20	·1373	0. 18	·03493	3. 0	59·6	60·5
0. 46	32. 50	1. 27	·1370	1. 58	·03538	9. 0	58·4	58·0
1. 9	32. 50	1. 55	·1378	5. 30	·03577	21. 0	58·2	59·5
1. 27	32. 25	2. 12	·1370	8. 51	·03584			
1. 55	33. 0	2. 40	·1377	9. 43	·03558			
2. 7	32. 5	2. 52	·1370	10. 10	·03544			
2. 36	33. 40	3. 4	·1372	12. 59	·03542			
2. 41	32. 55	3. 39	·1363	17. 12	·03520			
3. 0	33. 20	3. 49	·1368	22. 27	·03457			
3. 41	32. 10	5. 12	·1380	23. 59	·03458			
5. 28	32. 20	5. 20	·1377					
5. 54	31. 50	5. 39	·1383					
6. 23	32. 15	5. 43	·1380					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 7		May 7						
h m	° ′ ″	h m		h m		h m	°	°
6. 38	20. 31. 40	5. 57	·1383					
6. 53	32. 40	6. 13	·1384					
7. 9	28. 40	6. 30	·1380					
7. 19	28. 35	6. 43	·1382					
7. 26	29. 40	7. 1	·1376					
7. 36	28. 20	7. 13	·1381					
8. 0	27. 5	7. 42	·1375					
8. 53	30. 40	8. 22	·1374					
9. 4	30. 15	8. 43	·1376					
9. 58	31. 25	9. 3	·1372					
10. 18	31. 20	10. 11	·1375					
10. 28	30. 40	10. 26	·1372					
11. 10	30. 50	12. 22	·1375					
13. 43	29. 50	14. 42	·1369					
15. 13	29. 50	15. 44	·1372					
15. 28	29. 0	16. 10	·1369					
16. 44	29. 0	18. 35	·1372					
17. 45	27. 40	20. 31	·1375					
18. 20	27. 40	21. 10	·1372					
18. 27	27. 55	22. 7	·1371					
18. 32	27. 35	22. 21	·1374					
19. 40	28. 35	22. 40	·1368					
20. 41	30. 15	23. 59	·1370					
20. 54	30. 0							
21. 13	31. 15							
22. 8	30. 25							
22. 21	31. 15							
22. 26	30. 25							
22. 38	31. 0							
23. 4	30. 40							
23. 59	32. 40							
May 8		May 8		May 8		May 8		
0. 0	20. 32. 40	0. 0	·1370	0. 0	·03458	1. 0	59·3	60·6
0. 54	33. 5	0. 23	·1371	4. 24	·03546	3. 0	59·8	60·9
1. 33	32. 20	1. 11	·1371	9. 15	·03571	9. 0	59·7	60·6
2. 16	32. 35	1. 35	·1369	10. 11	·03536	21. 0	58·9	59·7
3. 34	31. 55	2. 8	·1374	13. 19	·03525	22. 0	57·6	59·0
6. 54	32. 20	2. 56	·1372	21. 15	·03497	23. 0	57·9	59·0
8. 33	31. 40	3. 41	·1374	23. 16	·03457			
9. 24	31. 45	4. 11	·1378	23. 59	·03457			
10. 24	30. 55	4. 59	·1381					
10. 42	31. 5	5. 26	·1380					
11. 5	30. 30	5. 43	·1384					
12. 53	31. 0	7. 7	·1384					
13. 24	30. 30	9. 8	·1380					
13. 45	31. 10	9. 13	·1377					
14. 18	29. 40	10. 46	·1379					
14. 23	29. 50	12. 13	·1376					
14. 40	29. 5	14. 6	·1378					
14. 56	29. 10	14. 56	·1376					
15. 3	30. 40	15. 12	·1380					
15. 23	29. 30	16. 20	·1379					
15. 42	29. 10	16. 54	·1383					
16. 0	29. 40	21. 25	·1370					
16. 10	28. 55	21. 44	·1372					
16. 21	29. 10	23. 11	·1370					
16. 33	27. 50	23. 48	·1374					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 8		May 8						
h m	° ′ ″	h m		h m		h m	°	°
16. 40	20. 28. 0	23. 59	·1373					
16. 55	26. 55							
17. 45	26. 30							
17. 58	27. 0							
18. 6	26. 20							
18. 9	27. 10							
18. 28	26. 40							
19. 33	26. 40							
20. 14	26. 55							
22. 51	32. 40							
23. 59	34. 15							
May 9		May 9		May 9		May 9		
0. 0	20. 34. 15	0. 0	·1373	0. 0	·03457	0. 0	58 ·8	59 ·9
0. 39	34. 45	0. 42	·1375	0. 39	·03464	1. 0	59 ·1	60 ·2
0. 56	34. 10	1. 10	·1373	4. 10	·03535	2. 0	59 ·2	60 ·3
1. 14	34. 35	1. 20	·1376	9. 11	·03560	3. 0	59 ·4	60 ·8
1. 43	34. 10	1. 41	·1374	10. 3	·03524	9. 0	58 ·9	59 ·9
1. 54	34. 30	2. 12	·1376	13. 6	·03503	21. 0	57 ·4	58 ·7
3. 16	32. 55	3. 13	·1381	19. 48	·03437	22. 0	58 ·0	59 ·5
4. 31	33. 0	3. 56	·1378	21. 42	·03396	23. 0	58 ·1	59 ·9
6. 16	32. 5	4. 18	·1381	23. 10	·03392			
6. 42	31. 55	4. 43	·1380	23. 59	·03403			
7. 0	32. 30	6. 43	·1384					
7. 14	32. 20	6. 58	·1389					
7. 25	31. 40	7. 29	·1384					
7. 55	31. 55	8. 12	·1382					
8. 9	31. 20	8. 23	·1384					
8. 30	31. 45	8. 42	·1382					
9. 10	31. 20	10. 12	·1380					
9. 26	31. 55	11. 10	·1379					
11. 8	30. 55	11. 33	·1382					
11. 25	31. 25	12. 22	·1377					
11. 42	30. 50	12. 40	·1379					
12. 54	30. 0	13. 2	·1377					
13. 14	30. 10	13. 24	·1381					
13. 51	29. 40	14. 25	·1379					
14. 39	29. 50	14. 39	·1381					
14. 49	29. 10	14. 57	·1378					
15. 38	28. 55	15. 50	·1380					
15. 46	28. 0	17. 44	·1376					
16. 47	27. 40	18. 54	·1376					
17. 11	26. 20	20. 9	·1373					
17. 26	26. 20	20. 55	·1377					
17. 41	24. 45	21. 12	·1375					
17. 57	26. 20	21. 40	·1378					
18. 8	25. 30	21. 54	·1369					
	***	21. 57	·1372					
20. 38	25. 30	22. 26	·1372					
21. 6	26. 40	22. 54	·1376					
21. 30	28. 40	23. 12	·1368					
21. 43	28. 20	23. 22	·1374					
22. 58	32. 0	23. 43	·1376					
23. 8	31. 40	23. 59	·1376					
23. 26	33. 35							
23. 56	33. 35							
23. 59	33. 40							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 10		May 10		May 10		May 10		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 33. 40	0. 0	·1376	0. 0	·03403	0. 0	58 ·3	60 ·0
0. 6	34. 20	0. 40	·1381	0. 58	·03410	1. 0	58 ·7	60 ·6
0. 24	35. 20	0. 56	·1373	2. 27	·03456	3. 0	58 ·7	59 ·7
0. 39	35. 30	1. 14	·1371	2. 39	·03476	9. 0	56 ·9	59 ·2
0. 54	34. 20	1. 33	·1379		***	21. 0	58 ·1	60 ·0
1. 13	34. 30	1. 43	·1371	2. 57	·03455			
1. 28	36. 0	2. 24	·1373		***			
1. 40	34. 50	2. 30	·1390	3. 38	·03477			
2. 14	35. 5	2. 58	·1363	3. 50	·03463			
2. 23	34. 50	3. 27	·1378	4. 11	·03480			
2. 29	36. 35	3. 35	·1380	6. 38	·03505			
	***	3. 41	·1373	9. 6	·03506			
2. 56	35. 10	3. 45	·1362	10. 4	·03477			
3. 21	35. 10	4. 12	·1377	13. 18	·03480			
3. 38	34. 40	4. 17	·1375	17. 4	·03476			
3. 43	32. 55	4. 26	·1380	21. 23	·03443			
5. 55	30. 25	4. 34	·1374	23. 59	·03440			
6. 23	30. 30	4. 40	·1379					
7. 0	30. 55	4. 54	·1375					
7. 41	29. 10	5. 0	·1380					
8. 42	30. 40	5. 12	·1376					
8. 53	30. 25	5. 41	·1382					
9. 3	31. 0	6. 18	·1384					
9. 49	31. 10	6. 41	·1389					
10. 40	30. 40	7. 3	·1384					
14. 33	30. 30	7. 20	·1383					
14. 42	30. 0	7. 53	·1388					
15. 14	29. 50	8. 41	·1385					
15. 27	30. 40	8. 53	·1382					
15. 50	28. 55	9. 15	·1382					
16. 10	28. 50	9. 42	·1385					
16. 57	27. 35	10. 0	·1383					
17. 23	28. 0	11. 20	·1383					
17. 36	27. 20	12. 12	·1380					
18. 3	27. 30	12. 50	·1381					
18. 10	27. 0	15. 19	·1376					
	***	15. 42	·1382					
19. 28	26. 45	17. 6	·1376					
20. 9	27. 20	21. 26	·1373					
20. 41	28. 30	23. 5	·1372					
21. 28	29. 25	23. 59	·1376					
23. 15	35. 10							
23. 46	36. 20							
23. 59	35. 55							
May 11		May 11		May 11		May 11		
0. 0	20. 35. 55	0. 0	·1376	0. 0	·03440	1. 0	58 ·8	60 ·0
0. 9	35. 50	0. 14	·1376	2. 56	·03497	3. 0	59 ·0	60 ·4
0. 39	36. 50	0. 29	·1379	6. 41	·03518	9. 0	59 ·4	61 ·3
0. 54	35. 55	0. 59	·1372	9. 26	·03534	9. 30	58 ·3	59 ·7
1. 23	36. 10	1. 20	·1373	10. 30	·03477	10. 15	57 ·8	59 ·0
2. 15	34. 20	1. 41	·1371	15. 3	·03413	21. 0	56 ·4	57 ·0
2. 24	34. 50	1. 54	·1373	16. 36	·03378			
2. 41	34. 20	2. 0	·1370	17. 40	·03370			
2. 51	34. 30	2. 22	·1369	21. 27	·03292			
3. 56	32. 25	2. 35	·1374	23. 59	·03318			
4. 58	31. 0	2. 43	·1372					
6. 4	30. 40	2. 58	·1378					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
May 11		May 11						
h m	° ′ ″	h m		h m		h m	°	°
8. 39	20. 30. 55	3. 14	·1377					
12. 15	30. 45	3. 45	·1375					
12. 27	31. 10	4. 19	·1380					
	***	4. 25	·1378					
13. 14	30. 20	5. 11	·1377					
13. 37	30. 55	5. 18	·1380					
13. 50	30. 25	6. 15	·1380					
14. 26	30. 0	6. 27	·1383					
14. 33	30. 50	9. 41	·1380					
14. 54	30. 50	10. 9	·1383					
15. 10	30. 20	10. 18	·1379					
15. 23	30. 30	10. 51	·1380					
15. 32	30. 5	10. 56	·1375					
15. 58	30. 30	12. 41	·1377					
16. 21	29. 40	13. 12	·1374					
16. 50	27. 0	13. 40	·1377					
16. 57	26. 45	14. 55	·1373					
17. 6	27. 10	16. 25	·1376					
17. 14	26. 35	17. 24	·1373					
17. 46	26. 40	18. 27	·1374					
18. 39	25. 30	19. 28	·1370					
18. 45	25. 55	19. 42	·1372					
18. 56	25. 20	21. 28	·1366					
19. 4	25. 55	22. 19	·1369					
19. 24	24. 20	22. 26	·1364					
19. 52	26. 30	22. 45	·1369					
20. 10	26. 30	22. 55	·1365					
21. 37	29. 10	23. 4	·1369					
	***	23. 12	·1367					
22. 13	31. 55	23. 40	·1378					
22. 22	31. 50	23. 49	·1384					
23. 10	34. 20	23. 59	·1378					
23. 41	36. 50							
23. 59	37. 45							
May 12		May 12		May 12		May 12		
0. 0	20. 37. 45	0. 0	·1378	0. 0	·03318	1. 0	58 ·0	59 ·9
0. 15	36. 50	0. 15	·1382	1. 11	·03340	3. 0	58 ·5	59 ·4
0. 26	37. 5	0. 33	·1379		(†)	9. 0	58 ·7	59 ·9
0. 38	35. 35	0. 45	·1367	2. 7	·03320	21. 10	57 ·0	58 ·5
1. 4	35. 20	0. 49	·1364	3. 54	·03319			
1. 43	36. 5	1. 11	·1364	6. 30	·03341			
2. 14	35. 20	1. 23	·1372	7. 42	·03340			
2. 38	36. 45	1. 53	·1378	9. 28	·03348			
2. 42	36. 35	2. 11	·1376	9. 43	·03340			
2. 58	37. 35	2. 50	·1382	9. 54	·03353			
4. 0	34. 10	3. 11	·1388	10. 12	·03320			
4. 5	34. 55	3. 30	·1371	12. 0	·03324			
4. 10	34. 25	3. 56	·1369	12. 59	·03300			
4. 36	33. 0	4. 10	·1372	13. 38	·03310			
4. 53	33. 25	4. 19	·1381	14. 14	·03297			
5. 13	32. 55	4. 42	·1376	14. 26	·03303			
5. 59	31. 10	4. 56	·1383	14. 55	·03263			
6. 10	31. 10	5. 21	·1382	16. 12	·03240			
6. 44	30. 15	5. 48	·1377	16. 40	·03204			
8. 44	30. 30	6. 21	·1382	17. 26	·03198			
9. 9	28. 35	7. 26	·1384	18. 11	·03234			
9. 14	28. 25	7. 51	·1381	18. 50	·03249			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
May 12		May 12		May 12				
h m	° ′ ″	h m		h m		h m	°	°
9. 35	20. 15. 40	8. 11	·1388	21. 26	·03234			
9. 46	16. 55	8. 28	·1390	22. 4	·03239			
10. 6	25. 40	8. 40	·1388	23. 59	·03217			
10. 23	21. 20	9. 25	·1374					
10. 41	23. 0	9. 41	·1387					
11. 5	23. 20	9. 54	·1377					
11. 28	21. 40	10. 10	·1381					
11. 48	22. 55	10. 25	·1377					
12. 2	24. 30	10. 41	·1383					
12. 30	24. 10	10. 56	·1375					
12. 58	18. 30	11. 44	·1364					
13. 9	17. 50	12. 5	·1367					
13. 25	19. 25	12. 27	·1378					
13. 30	18. 50	12. 50	·1381					
13. 47	23. 30	13. 14	·1370					
14. 8:	25. 30	13. 35	·1366					
14. 17	24. 40	13. 43	·1360					
14. 33	28. 25	13. 57	·1360					
15. 6	27. 30	14. 12	·1355					
15. 21	23. 20	14. 41	·1372					
15. 28	23. 25	15. 22	·1364					
15. 41	20. 10	15. 34	·1368					
15. 56	19. 20	15. 43	·1366					
16. 29	29. 10	16. 12	·1339					
16. 41	28. 30	16. 25	·1351					
16. 51	30. 0	16. 42	·1350					
16. 58	31. 50	17. 24	·1371					
17. 23	30. 20	17. 42	·1366					
17. 25	29. 10	18. 6	·1353					
17. 39	25. 10	18. 14	·1356					
17. 52	24. 35	19. 11	·1353					
18. 2	22. 55	20. 5	·1351					
18. 29	23. 55	20. 41	·1344					
19. 10	24. 10	20. 47	·1350					
19. 21	23. 40	21. 11	·1348					
	***	21. 19	·1342					
19. 55	26. 30	21. 34	·1345					
19. 58	28. 20	21. 44	·1348					
20. 1	27. 50	22. 11	·1346					
20. 25	28. 5	23. 3	·1363					
20. 33	27. 45	23. 15	·1364					
20. 39	26. 25	23. 36	·1374					
21. 4	30. 0	23. 55	·1371					
21. 11	29. 20	23. 59	·1372					
22. 0	34. 55							
22. 30	35. 20							
22. 41	36. 15							
22. 46	35. 45							
22. 58	37. 10							
23. 11	37. 10							
23. 27	38. 40							
23. 55	39. 20							
23. 59	40. 0							
May 13		May 13		May 13		May 13		
0. 0	20. 40. 0	0. 0	·1372	0. 0	·03217	0. 20	56 ·9	58 ·5
0. 12	41. 10	0. 17	·1381	1. 6	·03258	4. 40	56 ·9	57 ·6
0. 30	40. 0	0. 26	·1362	2. 1	·03289	9. 0	57 ·1	59 ·0
	***							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

May 12d. 1h. 15m. The Vertical Force Magnet was examined by the Astronomer Royal, and the tightness of the adjusting screws of the magnet tested.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 13		May 13		May 13				
h m	° ′ ″	h m		h m		h m	°	°
0. 56	20. 41. 30	0. 54	·1356	2. 26	·03274	21. 0	58·1	59·4
1. 10	40. 0	1. 23	·1371	4. 32	·03317			
1. 15	40. 40	1. 45	·1375	4. 47	·03340			
1. 24	39. 45	1. 56	·1383	6. 22	·03345			
1. 29	40. 15	2. 0	·1380	6. 40	·03307			
1. 34	39. 30	2. 6	·1382	6. 44	·03322			
1. 43	40. 5	2. 26	·1351	7. 0	·03283			
1. 55	41. 55	3. 15	·1382	7. 9	·03297			
2. 6	42. 15	3. 26	·1376	7. 25	·03284			
2. 11	41. 15	3. 42	·1383	8. 30	·03306			
2. 18	41. 35	3. 56	·1376	9. 40	·03300			
2. 26	40. 10	4. 12	·1379	9. 56	·03276			
2. 46	39. 20	4. 27	·1373	10. 11	·03295			
3. 0	39. 35	4. 36	·1376	10. 19	·03280			
3. 25	39. 15	4. 41	·1374	11. 24	·03264			
3. 34	39. 50	5. 0	·1394	12. 4	·03287			
3. 42	38. 45	5. 20	·1387	15. 10	·03302			
3. 55	38. 0	5. 32	·1380	16. 21	·03316			
3. 59	38. 10	5. 55	·1384	19. 11	·03314			
4. 9	37. 15		***	21. 18	·03298			
4. 33	35. 30	6. 21	·1384	23. 59	·03273			
4. 37	35. 50	6. 32	·1404					
4. 56	34. 35	6. 35	·1407					
5. 15	35. 20	6. 45	·1390					
5. 38	31. 10	7. 0	·1416					
5. 46	32. 40	7. 12	·1384					
5. 55	33. 15	7. 20	·1395					
5. 59	31. 50	7. 30	·1374					
6. 16	31. 35	7. 50	·1366					
6. 18	34. 0	7. 56	·1368					
6. 25	29. 20	8. 26	·1367					
6. 32	32. 15	8. 51	·1377					
6. 44	25. 0	9. 12	·1369					
6. 57	31. 45	9. 26	·1372					
7. 6	26. 15	10. 12	·1348					
7. 20	31. 40	10. 18	·1351					
7. 29	30. 0	10. 28	·1388					
7. 39	30. 0	10. 37	·1380					
7. 48	27. 25	10. 44	·1385					
8. 6	29. 10	11. 20	·1366					
8. 18	28. 25	11. 27	·1371					
8. 41	30. 30	11. 43	·1366					
8. 47	30. 15	11. 55	·1362					
9. 19	23. 15	12. 44	·1364					
9. 51	22. 40	13. 18	·1370					
9. 59	20. 55	13. 25	·1368					
10. 10	7. 40	13. 36	·1369					
10. 26	16. 10	13. 57	·1363					
10. 29	15. 50	14. 39	·1365					
10. 44	23. 5	15. 21	·1364					
10. 59	26. 50	15. 43	·1360					
11. 30	26. 20		***					
11. 34	25. 15	16. 23	·1358					
11. 46	25. 40	16. 58	·1362					
11. 54	25. 25	17. 41	·1357					
12. 10	27. 30	17. 55	·1362					
12. 46	28. 50	18. 11	·1355					
13. 12	30. 55	19. 6	·1343					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 13		May 13						
h m	° ′ ″	h m		h m		h m	°	°
13. 24	20. 30. 30	19. 24	·1346					
13. 50	31. 25	19. 57	·1345					
14. 29	31. 25	22. 6	·1356					
14. 44	29. 40	22. 16	·1354					
14. 58	29. 40	22. 27	·1360					
15. 16	27. 55	22. 41	·1354					
15. 43	27. 55	22. 51	·1357					
16. 2	29. 30	23. 51	·1362					
16. 10	29. 0	23. 59	·1365					
16. 26	29. 0							
16. 58	26. 55							
	***							
17. 13	27. 10							
17. 33	25. 40							
17. 45	27. 40							
17. 51	25. 50							
17. 59	26. 5							
18. 7	25. 15							
18. 14	26. 5							
18. 24	25. 15							
18. 30	26. 10							
18. 42	26. 0							
19. 2	24. 20							
19. 4	26. 25							
19. 16	26. 55							
19. 33	25. 55							
19. 59	25. 30							
20. 43	26. 0							
20. 58	27. 5							
21. 4	26. 45							
21. 58	29. 35							
22. 11	31. 10							
22. 28	31. 0							
23. 51	36. 10							
23. 59	36. 0							
May 14		May 14		May 14		May 14		
0. 0	20. 36. 0	0. 0	·1365	0. 0	·03273	1. 0	58·3	59·[illegible]
0. 17	37. 5	0. 42	·1367	0. 55	·03282	3. 0	58·4	[illegible]
1. 10	38. 50	1. 12	·1374	2. 55	·03336	9. 0	58·0	[illegible]
1. 26	38. 20	1. 30	·1370	3. 11	·03333	21. 0	[illegible]	[illegible]
1. 41	39. 5	1. 54	·1380	8. 48	·03366			
1. 54	38. 40	2. 6	·1373	9. 22	·03352			
2. 12	38. 40	2. 29	·1376	12. 26	·03340			
2. 39	38. 0	2. 41	·1372	12. 57	·03303			
	***	2. 57	·1382	14. 43	·03317			
3. 32	38. 40	3. 12	·1366	15. 4	·03302			
3. 46	37. 25		(†)	15. 25	·03308			
4. 10	37. 0	8. 45	·1379	15. 57	·03303			
4. 40	34. 45	9. 6	·1372	17. 19	·03325			
5. 3	34. 55	9. 24	·1361	22. 54	·03300			
5. 27	33. 55	9. 40	·1361	23. 59	·03292			
5. 57	34. 10	9. 48	·1366					
6. 25	32. 40	10. 10	·1366					
6. 28	32. 55	10. 20	·1361					
7. 14	30. 55	10. 41	·1361					
7. 39	30. 10	10. 56	·1367					
8. 1	26. 5	11. 2	·1365					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 14		May 14						
h m	° ′ ″	h m		h m		h m	°	°
8. 10	20. 25. 50	11. 24	·1368					
8. 30	18. 20	12. 22	·1357					
8. 54	25. 0	12. 29	·1359					
9. 2	24. 40	12. 45	·1357					
9. 16	25. 40	13. 22	·1368					
9. 26	25. 20	13. 41	·1373					
9. 35	25. 30	14. 9	·1364					
9. 59	27. 10	14. 50	·1359					
10. 12	26. 30	14. 58	·1363					
10. 19	26. 45	15. 25	·1357					
10. 33	28. 40	15. 45	·1364					
11. 24	28. 55	16. 17	·1368					
11. 41	28. 0	17. 15	·1355					
12. 2	28. 30	17. 59	·1357					
12. 25	35. 20	20. 24	·1344					
12. 30	34. 55	22. 43	·1357					
12. 35	35. 55	23. 12	·1354					
13. 0	29. 30	23. 54	·1362					
13. 9	29. 30	23. 59	·1360					
13. 30	25. 10							
13. 45	23. 45							
13. 59	23. 50							
14. 16	26. 0							
14. 36	25. 20							
14. 42	26. 5							
14. 52	29. 20							
15. 9	29. 30							
15. 24	32. 30							
15. 40	32. 0							
15. 51	30. 45							
15. 55	30. 25							
16. 14	27. 55							
16. 48	25. 25							
17. 41	26. 0							
17. 48	25. 10							
17. 57	26. 10							
18. 6	25. 35							
18. 26	25. 40							
18. 39	24. 30							
18. 55	25. 5							
18. 59	25. 0							
19. 18	26. 20							
19. 26	26. 15							
19. 42	27. 55							
20. 9	27. 40							
	***							
20. 58	29. 55							
21. 7	29. 30							
23. 7	34. 40							
23. 52	35. 10							
23. 59	35. 20							
May 15		May 15		May 15		May 15		
0. 0	20. 35. 20	0. 0	·1360	0. 0	·03292	1. 0	58 ·6	59 ·2
1. 23	37. 30	0. 23	·1365	2. 57	·03354	3. 0	58 ·6	59 ·5
2. 42	36. 55	0. 46	·1365	5. 43	·03364	9. 0	58 ·8	59 ·7
2. 56	36. 0	1. 22	·1364	11. 53	·03382	21. 0	59 ·6	60 ·0
3. 9	36. 0	2. 12	·1358	15. 42	·03413	22. 0	59 ·2	60 ·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 15		May 15		May 15		May 15		
h m	° ′ ″	h m		h m		h m	°	°
5. 33	20. 32. 55	2. 54	·1360	19. 22	·03415	23. 0	59 ·3	60 ·8
6. 16	31. 45	4. 6	·1367	23. 59	·03358			
6. 44	31. 55	4. 20	·1364					
7. 25	30. 55	4. 38	·1368					
8. 7	30. 30	4. 46	·1366					
9. 39	30. 25	5. 41	·1367					
9. 54	29. 20	6. 0	·1371					
10. 14	29. 55	6. 12	·1368					
10. 39	29. 45	6. 35	·1374					
10. 56	28. 5	8. 6	·1374					
11. 9	28. 30	8. 55	·1371					
11. 43	28. 20	9. 22	·1371					
12. 9	29. 10	9. 43	·1368					
12. 58	29. 20	10. 9	·1372					
13. 15	28. 0	10. 41	·1365					
13. 49	28. 15	11. 10	·1373					
14. 11	30. 0	11. 40	·1368					
14. 39	29. 45	12. 26	·1368					
15. 6	29. 45	12. 54	·1365					
15. 24	29. 10	14. 9	·1360					
16. 53	27. 55	14. 40	·1363					
19. 8	25. 0	14. 54	·1361					
19. 16	25. 25	15. 8	·1364					
19. 28	24. 50	15. 11	·1363					
20. 27	25. 0	18. 42	·1360					
20. 32	24. 10	21. 10	·1350					
20. 43	25. 30	22. 56	·1352					
21. 51	28. 0	23. 38	·1354					
23. 45	34. 0	23. 59	·1360					
23. 59	35. 0							
May 16		May 16		May 16		May 16		
0. 0	20. 35. 0	0. 0	·1360	0. 0	·03358	0. 0	59 ·3	60 ·9
1. 0	36. 55	0. 12	·1359	0. 42	·03363	1. 0	59 ·6	61 ·0
2. 9	37. 25	0. 35	·1362	5. 43	·03412	3. 0	59 ·6	61 ·0
2. 43	36. 25	0. 45	·1364	12. 15	·03409	9. 0	58 ·8	60 ·0
4. 52	34. 20	1. 6	·1367	19. 34	·03383	21. 0	58 ·8	60 ·7
5. 21	32. 55	1. 12	·1364	23. 59	·03344	22. 0	58 ·8	60 ·4
5. 59	32. 35	3. 26	·1374			23. 0	58 ·8	60 ·0
6. 22	31. 55	5. 0	·1376					
8. 42	30. 40	6. 2	·1383					
9. 3	29. 5	6. 44	·1380					
10. 0	30. 0	9. 10	·1378					
10. 44	30. 0	9. 14	·1382					
10. 58	30. 20	10. 25	·1374					
11. 22	29. 55	13. 55	·1371					
12. 8	30. 10	17. 23	·1373					
13. 26	29. 55	22. 42	·1356					
14. 58	30. 30	23. 51	·1356					
15. 13	29. 50	23. 59	·1357					
16. 9	29. 25							
16. 30:	28. 45							
16. 39	29. 40							
16. 43	28. 40							
19. 34	26. 30							
20. 36	26. 40							
22. 14	30. 15							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 16								
h m	° ′ ″	h m		h m		h m	°	°
22. 36	20. 30. 30							
23. 59	33. 50							
May 17		May 17		May 17		May 17		
0. 0	20. 33. 50	0. 0	·1357	0. 0	·03344	0. 0	58 ·7	60 ·5
1. 39	35. 5	0. 22	·1360	4. 56	·03417	1. 0	59 ·3	60 ·0
3. 33	35. 10	0. 42	·1363	10. 24	·03420	2. 0	59 ·2	60 ·0
6. 53	31. 40	0. 54	·1364	13. 10	·03400	3. 0	59 ·1	60 ·1
8. 3	31. 35	2. 41	·1378	13. 41	·03377	9. 0	60 ·5	60 ·8
8. 26	30. 40	2. 45	·1377	16. 24	·03363	21. 0	57 ·7	59 ·2
9. 9	30. 50	3. 41	·1386	17. 16	·03344			
9. 17	30. 10	4. 12	·1381	18. 30	·03340			
9. 44	30. 15	5. 12	·1387	19. 25	·03319			
10. 13:	29. 50	6. 41	·1385	23. 59	·03297			
10. 26	30. 20	7. 6	·1388					
10. 56:	29. 55	7. 40	·1385					
11. 12	30. 55	7. 44	·1386					
11. 36	29. 55	8. 31	·1381					
12. 28	29. 30	9. 26	·1380					
12. 53	28. 55	9. 51	·1377					
13. 10	30. 45	11. 12	·1380					
13. 20	30. 25	12. 45	·1376					
13. 47	26. 15	13. 23	·1385					
14. 16	26. 5	14. 34	·1371					
14. 47	27. 40	14. 44	·1376					
15. 6:	27. 5	15. 13	·1372					
15. 23	27. 35	16. 22	·1375					
15. 38	27. 25	16. 40	·1380					
15. 42	27. 0	17. 11	·1382					
	***	18. 20	·1369					
16. 22	26. 10	18. 56	·1373					
16. 28	26. 30	20. 11	·1376					
17. 1	25. 25	20. 49	·1373					
17. 9	26. 5	22. 20	·1357					
17. 26	24. 50	23. 11	·1353					
17. 32	25. 25	23. 42	·1354					
17. 44	25. 0	23. 59	·1356					
18. 10	25. 35							
18. 38	25. 10							
18. 45	25. 55							
18. 54	25. 0							
19. 21	25. 0							
19. 29	23. 35							
19. 42	24. 10							
19. 45	23. 10							
20. 4	24. 0							
20. 15	23. 25							
20. 23	23. 40							
20. 40:	25. 30							
20. 58	25. 20							
22. 36	31. 55							
23. 59	35. 30							
May 18		May 18		May 18		May 18		
0. 0	20. 35. 30	0. 0	·1356	0. 0	·03297	1. 0	58 ·7	59 ·8
0. 23	37. 10	0. 23	·1362	2. 58	·03357	3. 0	58 ·9	60 ·1
1. 48	39. 45	0. 45	·1366	5. 16	·03427	9. 0	59 ·4	60 ·5
2. 45	38. 45	1. 26	·1369	5. 27	·03420	21. 0	58 ·8	60 ·4

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 18		May 18		May 18				
h m	° ′ ″	h m		h m		h m	°	°
3. 2	20. 39. 15	1. 56	·1375	5. 53	·03437			
3. 9	38. 30	2. 25	·1371	9. 2	·03420			
3. 21	39. 10	2. 40	·1375	11. 19	·03416			
3. 26	38. 25	2. 55	·1374	12. 44	·03400			
3. 32	38. 55	3. 11	·1382	13. 55	·03363			
3. 56	38. 0	3. 17	·1374	16. 4	·03378			
4. 13	39. 0	3. 26	·1381	21. 19	·03340			
4. 20	38. 55	3. 35	·1375	23. 59	·03332			
4. 25	37. 40	3. 42	·1381					
4. 56	34. 0	3. 55	·1383					
5. 10	34. 45	4. 3	·1374					
5. 20	33. 50	4. 6	·1376					
5. 46	34. 10	4. 9	·1374					
6. 5	33. 15	4. 20	·1376					
6. 21	32. 5	4. 36	·1370					
6. 58	31. 20	5. 15	·1382					
7. 51	32. 0	5. 26	·1375					
8. 8	31. 25	5. 51	·1384					
8. 25	31. 50	6. 10	·1382					
9. 10	30. 25	6. 12	·1384					
9. 24	31. 10	6. 25	·1381					
9. 38	30. 20	6. 55	·1385					
9. 50	30. 45	7. 3	·1382					
10. 10	29. 40	7. 12	·1385					
10. 43	30. 0	7. 25	·1386					
10. 53	29. 25	7. 44	·1382					
11. 8	30. 55	8. 6	·1379					
11. 44	29. 10	8. 33	·1382					
11. 48	29. 40	8. 41	·1379					
11. 55	28. 50	8. 50	·1380					
11. 59	29. 40	9. 8	·1376					
12. 10	28. 50	9. 20	·1385					
12. 30	30. 20	9. 41	·1381					
12. 54	29. 55	9. 44	·1382					
13. 37	31. 10	10. 12	·1377					
13. 51	28. 45	10. 54	·1379					
14. 26	25. 45	11. 10	·1384					
14. 48	24. 55	11. 25	·1379					
15. 11	26. 5	11. 41	·1380					
15. 35	25. 5	11. 44	·1375					
16. 1	26. 40	11. 54	·1379					
16. 23	26. 10	11. 57	·1374					
16. 31	25. 40	12. 4	·1381					
17. 10	24. 25	12. 13	·1375					
17. 20	25. 20	12. 35	·1382					
	***	12. 49	·1378					
18. 4	25. 25	13. 12	·1390					
18. 14	26. 35	13. 56	·1379					
18. 33	26. 40	15. 41	·1376					
19. 1	25. 55	16. 14	·1376					
19. 8	27. 25	16. 30	·1379					
19. 17	26. 45	17. 34	·1381					
19. 23	26. 50	17. 54	·1378					
19. 30	24. 30	18. 17	·1381					
20. 0	27. 0	19. 11	·1376					
20. 14	26. 45	19. 35	·1367					
20. 20	25. 25	19. 55	·1368					
20. 30	27. 0	20. 20	·1362					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 18		May 18						
h m	° ′ ″	h m		h m		h m	°	°
20. 36	20. 26. 45	20. 31	·1365					
20. 45	27. 55	20. 33	·1364					
20. 58	28. 0	20. 48	·1366					
21. 9	26. 50	21. 11	·1364					
21. 43	28. 25	21. 29	·1364					
22. 55	34. 25	22. 11	·1355					
23. 37	35. 25	22. 51	·1358					
23. 59	35. 20	22. 59	·1356					
		23. 15	·1360					
		23. 26	·1358					
		23. 42	·1361					
		23. 59	·1357					
May 19		May 19		May 19		May 19		
0. 0	20. 35. 20	0. 0	·1357	0. 0	·03332	1. 0	59·7	62·1
0. 30	36. 0	0. 30	·1360	0. 40	·03343	3. 0	60·0	61·0
0. 55	36. 55	0. 43	·1361	3. 48	·03438	9. 0	60·1	62·1
1. 6	36. 30	1. 12	·1361	4. 9	·03424	22. 0	59·6	60·0
	***	1. 24	·1366	4. 28	·03462			
1. 53	38. 30	1. 40	·1371	4. 41	·03452			
	***	1. 44	·1368	5. 5	·03480			
2. 40	39. 5	2. 20	·1371	5. 22	·03470			
2. 47	39. 50		***	6. 27	·03480			
2. 51	39. 20	2. 54	·1381	6. 48	·03468			
3. 7	38. 25	2. 57	·1373	7. 12	·03482			
3. 12	39. 30	3. 22	·1381	10. 34	·03464			
3. 23	39. 40	3. 39	·1364	11. 30	·03443			
3. 44	43. 20	3. 50	·1376	12. 41	·03440			
3. 56	43. 20	3. 57	·1372	12. 55	·03424			
4. 10	40. 20	4. 11	·1355	14. 56	·03440			
4. 16	40. 0	4. 26	·1379	17. 36	·03437			
4. 28	41. 10	4. 41	·1369	19. 29	·03416			
4. 40	39. 50	5. 4	·1394	19. 35	·03422			
4. 43	40. 35	5. 19	·1372	23. 59	·03400			
4. 52	40. 20	5. 27	·1367					
4. 59	41. 15	6. 14	·1388					
5. 10	41. 0	6. 15	·1386					
5. 21	39. 0	6. 35	·1396					
5. 37	38. 5	6. 53	·1384					
5. 54	35. 40	7. 12	·1394					
6. 23	34. 10	7. 34	·1384					
6. 31	34. 30	7. 58	·1382					
7. 9:	31. 55	8. 33	·1375					
7. 25	32. 25	8. 45	·1378					
7. 53	31. 55	9. 0	·1381					
8. 9	32. 0	9. 22	·1375					
8. 16	30. 45	9. 43	·1380					
8. 58	31. 15	9. 56	·1375					
9. 14	28. 5	10. 26	·1377					
9. 25	27. 40	10. 41	·1383					
9. 47	29. 40	10. 55	·1381					
9. 57	29. 25	11. 16	·1387					
10. 6	30. 10	11. 27	·1383					
10. 26	30. 20	11. 54	·1380					
10. 42	29. 55	12. 22	·1383					
10. 58	31. 0	12. 36	·1380					
11. 12	30. 40	12. 54	·1383					
11. 26	29. 0	13. 10	·1376					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 19		May 19						
h m	° ′ ″	h m		h m		h m	°	°
11. 40	20. 29. 0	13. 25	·1371					
11. 49	27. 30	13. 44	·1373					
12. 2	27. 35	14. 6	·1368					
12. 10	28. 55	14. 16	·1372					
12. 13	28. 0	14. 22	·1371					
12. 26	27. 30		***					
12. 35	29. 10	15. 59	·1372					
12. 57	25. 20	17. 22	·1367					
13. 8	25. 25		***					
13. 20	27. 0	18. 44	·1369					
13. 27	27. 0	18. 55	·1365					
13. 40	28. 25	19. 12	·1369					
13. 51	28. 0	19. 56	·1360					
14. 7	29. 45	20. 26	·1359					
14. 18	29. 45	20. 42	·1364					
14. 24	29. 0	21. 25	·1359					
14. 36	29. 10	21. 54	·1364					
15. 4	28. 15	22. 36	·1366					
15. 40	28. 30	22. 59	·1364					
15. 54	28. 10	23. 23	·1372					
16. 37	27. 0	23. 44	·1364					
17. 4	27. 30	23. 56	·1367					
	***	23. 59	·1366					
17. 26	26. 25							
	***							
17. 54	27. 10							
18. 0	25. 25							
18. 7	26. 5							
18. 29	26. 10							
18. 32	24. 0							
18. 41	24. 15							
18. 44	25. 20							
18. 50	24. 10							
18. 58	26. 10							
19. 7	25. 10							
19. 17	24. 50							
19. 26	27. 15							
	***							
20. 18	27. 25							
20. 40	29. 45							
20. 52	29. 40							
21. 0	28. 30							
21. 15	28. 10							
23. 15	33. 55							
23. 42	33. 5							
23. 55	33. 50							
23. 59	33. 50							
May 20		May 20		May 20		May 20		
0. 0	20. 33. 50	0. 0	·1366	0. 0	·03400	1. 0	60·2	61·7
0. 13	33. 25	0. 12	·1364	0. 23	·03410	9. 15	60·4	62·1
0. 26	34. 40	0. 26	·1368	6. 41	·03472	21. 0	59·2	61·0
0. 46	34. 30	0. 47	·1366	9. 42	·03478			
1. 23	35. 25	1. 12	·1370	10. 12	·03457			
3. 23	33. 25	1. 43	·1370	13. 45	·03443			
3. 59	33. 25	2. 11	·1374	18. 54	·03405			
4. 29	32. 40		***	20. 36	·03407			
4. 57	32. 50	3. 41	·1375	23. 59	·03378			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 20		May 20						
h m	° ′ ″	h m		h m		h m	°	°
6. 9	20. 31. 40	4. 10	·1378					
7. 30	31. 50		***					
7. 53	31. 40	4. 41	·1377					
8. 26	32. 5	5. 36	·1382					
9. 33	31. 0	6. 13	·1380					
9. 54	31. 20	6. 42	·1383					
10. 2	30. 50	6. 50	·1380					
11. 58	30. 20	7. 0	·1383					
12. 20	29. 50	7. 14	·1380					
12. 40	29. 45	9. 12	·1380					
12. 50	30. 15	9. 55	·1375					
12. 55	29. 40	10. 47	·1376					
13. 21	28. 55	12. 44	·1374					
14. 14	29. 30	12. 52	·1377					
14. 57	28. 20		***					
15. 14	30. 0	15. 24	·1377					
15. 38	28. 30	15. 40	·1374					
15. 56	29. 50	16. 11	·1380					
16. 28	27. 55	17. 13	·1376					
16. 56	28. 0	17. 55	·1380					
17. 26	27. 50	18. 55	·1376					
17. 37	27. 0	19. 9	·1377					
17. 46	27. 0	19. 56	·1374					
18. 3	26. 5	20. 44	·1372					
18. 14	26. 5	20. 52	·1377					
18. 53	25. 0	21. 24	·1369					
19. 6	25. 35	22. 11	·1369					
19. 29	25. 10	22. 19	·1366					
19. 41	25. 40	22. 42	·1370					
19. 51	25. 0	22. 57	·1367					
20. 3	25. 55	23. 12	·1355					
20. 38	26. 10	23. 28	·1367					
20. 41	27. 15	23. 59	·1370					
20. 56	27. 40							
21. 14	32. 30							
22. 1	34. 10							
22. 12	34. 0							
22. 43	35. 25							
22. 55	35. 35							
22. 59	34. 10							
23. 44	34. 40							
23. 59	35. 5							
May 21		May 21		May 21		May 21		
0. 0	20. 35. 5	0. 0	·1370	0. 0	·03378	1. 0	59 ·9	60 ·8
0. 43	36. 35	0. 41	·1373	1. 32	·03404	3. 0	59 ·7	61 ·8
0. 55	37. 20	0. 56	·1376	1. 44	·03416	9. 0	59 ·4	61 ·0
1. 32	37. 0	1. 10	·1373	3. 58	·03437	21. 0	58 ·3	60 ·0
1. 38	32. 55	1. 36	·1372	8. 54	·03434			
3. 41	30. 5	1. 42	·1376	13. 43	·03417			
5. 41	29. 55	2. 15	·1371	16. 29	·03397			
7. 28	30. 15	3. 40	·1373	21. 20	·03343			
7. 32	31. 25	4. 11	·1379	22. 44	·03340			
8. 11	30. 55	4. 22	·1376	23. 59	·03316			
8. 32	31. 10	4. 56	·1378					
12. 0	30. 0	6. 55	·1376					
12. 12	30. 20	7. 11	·1380					
12. 26	30. 10	7. 26	·1377					
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 21		May 21						
h m	° ′ ″	h m		h m		h m	°	°
13. 50	20. 30. 5	10. 26	·1379					
14. 8	29. 30	11. 52	·1379					
14. 21	29. 40	12. 21	·1382					
15. 41	27. 50	13. 10	·1378					
15. 56	27. 50	13. 39	·1380					
16. 13	28. 50	13. 50	·1376					
16. 43	27. 35	14. 53	·1380					
16. 55	28. 10	15. 20	·1378					
	***	15. 41	·1375					
17. 57	27. 30	17. 41	·1376					
18. 6	27. 50	18. 51	·1379					
18. 55	26. 30	19. 57	·1375					
19. 7	27. 0	20. 14	·1376					
	***	20. 51	·1373					
19. 48	25. 25	21. 11	·1368					
20. 11	25. 50	21. 41	·1367					
20. 44	25. 10	21. 50	·1362					
20. 53	26. 20	22. 0	·1362					
21. 17	26. 30	22. 22	·1356					
21. 53	28. 30	22. 41	·1359					
22. 5	30. 0	22. 56	·1366					
22. 9	30. 0	23. 11	·1364					
22. 50	34. 45	23. 23	·1372					
23. 8	33. 55	23. 42	·1368					
23. 21	35. 25	23. 59	·1376					
23. 41	34. 30							
23. 59	36. 20							
May 22		May 22		May 22		May 22		
0. 0	20. 36. 20	0. 0	·1376	0. 0	·03316	1. 0	59 ·5	61 ·1
0. 12	35. 40	0. 11	·1379	3. 41	·03374	3. 0	59 ·6	61 ·2
0. 18	36. 10	0. 18	·1375	5. 41	·03412	9. 0	59 ·2	60 ·8
0. 25	35. 5	0. 23	·1377	9. 12	·03403	21. 0	58 ·3	58 ·7
0. 58	36. 0	0. 26	·1370	9. 44	·03383	22. 0	58 ·3	58 ·8
1. 8	37. 5	0. 33	·1372	19. 0	·03333	23. 20	58 ·4	58 ·9
1. 53	36. 10	1. 22	·1384	21. 11	·03320			
1. 59	35. 30	1. 53	·1380	23. 25	·03283			
2. 20	35. 55	2. 11	·1383	23. 59	·03300			
2. 39	35. 5		***					
4. 10	33. 40	3. 10	·1376					
5. 1	32. 0	3. 22	·1378					
5. 12	31. 20	3. 47	·1373					
5. 39	31. 20	4. 12	·1375					
5. 49	30. 50	4. 22	·1368					
6. 14	30. 30	4. 43	·1370					
6. 39	31. 0	5. 0	·1380					
7. 45	29. 55	5. 12	·1376					
8. 26	31. 0	5. 25	·1376					
8. 41	30. 45	5. 35	·1381					
8. 55	31. 0	5. 51	·1375					
9. 13	30. 0	6. 10	·1377					
9. 26	30. 40	6. 36	·1374					
9. 49	30. 40	8. 3	·1378					
10. 26	31. 20	8. 27	·1376					
12. 36	30. 10	8. 51	·1378					
12. 40	30. 25	9. 11	·1380					
13. 18	29. 20	9. 36	·1374					
13. 27	30. 10	9. 53	·1376					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 22		May 22						
h m	° ′ ″	h m		h m		h m	°	°
15. 45	20. 30. 25	12. 23	·1374					
15. 57	29. 50	12. 41	·1376					
16. 13	29. 50	12. 56	·1375					
16. 44	28. 15	14. 57	·1377					
16. 59	28. 20	15. 41	·1374					
17. 54	27. 40	16. 22	·1378					
18. 25	27. 55	17. 12	·1377					
18. 28	29 30	17. 27	·1380					
18. 40	27. 20	18. 10	·1381					
18. 54	30. 0	18. 42	·1375					
19. 8	30. 10	18. 54	·1365					
19. 26	29. 5	19. 6	·1361					
19. 59	28. 50	19. 27	·1370					
20. 43	27. 40	20. 18	·1375					
21. 57	29. 30	21. 13	·1374					
22. 32	31. 55	22. 4	·1369					
22. 40	32. 0	22. 26	·1370					
23. 50	34. 30	22. 45	·1366					
23. 59	34. 40	23. 10	·1366					
		23. 14	·1371					
		23. 44	·1364					
		23. 59	·1366					
May 23		May 23		May 23		May 23		
0. 0	20. 34. 40	0. 0	·1366	0. 0	·03300	0. 0	58 ·7	60 ·2
0. 41	35. 55	0. 44	·1373	1. 25	·03306	1. 0	59 ·1	60 ·7
0. 54	35. 30	1. 11	·1374	6. 10	·03383	2. 0	58 ·8	60 ·0
1. 0	36. 0	1. 20	·1373	9. 26	·03388	3. 0	59 ·3	60 ·2
1. 16	35. 30	1. 56	·1377	10. 11	·03368	9. 0	59 ·7	60 ·7
1. 26	35. 40	2. 10	·1375	19. 10	·03340	21. 0	58 ·7	59 ·0
4. 15	31. 40	2. 20	·1376	22. 10	·03303	22. 0	57 ·1	57 ·6
5. 41	30. 10	2. 36	·1379	23. 11	·03263	23. 0	57 ·8	58 ·1
7. 26	30. 20	3. 10	·1378	23. 59	·03269			
8. 25	29. 55	3. 14	·1380					
10. 50	30. 35	3. 44	·1377					
11. 55	30. 0	3. 55	·1379					
12. 13	30. 25	4. 6	·1377					
13. 37	29. 40	4. 12	·1378					
13. 42	30. 15	4. 23	·1376					
14. 9	29. 40	5. 12	·1380					
14. 21	29. 50	5. 47	·1378					
14. 43	29. 20	7. 44	·1383					
15. 0	29. 30	10. 32	·1376					
15. 29	27. 15	10. 44	·1379					
15. 56	28. 45	11. 57	·1376					
16. 41	27. 0	12. 25	·1379					
17. 16	26. 25	12. 56	·1379					
17. 48	27. 35	13. 14	·1375					
18. 6	27. 15	13. 49	·1380					
18. 23	26. 40	14. 13	·1376					
18. 39	25. 20	15. 26	·1378					
18. 54	25. 0	15. 56	·1374					
19. 15	25. 40	16. 42	·1381					
19. 32	24. 40	17. 20	·1374					
20. 56	25. 30	18. 0	·1377					
21. 56	28. 10	18. 8	·1376					
23. 40	34. 20	18. 29	·1379					
23. 57	34. 40	19. 11	·1374					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
May 23		May 23						
h m	° ′ ″	h m		h m		h m	°	°
23. 59	20 34. 45	19. 20	·1376					
		20. 5	·1371					
		20. 27	·1372					
		21. 58	·1361					
		22. 22	·1356					
		22. 35	·1357					
		23. 40	·1367					
		23. 55	·1366					
		23. 59	·1368					
May 24		May 24		May 24		May 24		
0. 0	20. 34. 45	0. 0	·1368	0. 0	·03269	0. 0	58 ·1	58 ·1
0. 4	35. 25	0. 13	·1367	5. 13	·03316	1. 0	58 ·6	58 ·5
0. 12	34. 50	0. 22	·1370	8. 56	·03302	2. 0	58 ·2	58 ·7
2. 7	36. 35	0. 41	·1376	9. 0	·03297*	3. 0	58 ·3	59 ·1
2. 22	36. 0	0. 56	·1371		(†)	9. 0	58 ·3	58 ·9
3. 55	32. 45	1. 26	·1375	20. 56	·03300	21. 0	58 ·8	60 ·2
4. 4	33. 0	1. 43	·1373	23. 59	·03269			
5. 33	30. 55	2. 10	·1377					
6. 40	30. 5	3. 26	·1378					
7. 23	30. 5	3. 41	·1381					
8. 0	30. 40	4. 8	·1378					
8. 11	30. 20	4. 14	·1380					
9. 10	30. 10	4. 53	·1377					
9. 55	30. 0	4. 59	·1381					
10. 28	28. 50	5. 14	·1378					
10. 41	29. 20	5. 31	·1382					
10. 46	28. 55	5. 41	·1380					
11. 8	29. 50	5. 57	·1383					
11. 54	26. 15	6. 11	·1381					
12. 13	27. 40	6. 44	·1381					
12. 27	26. 45	6. 57	·1383					
13. 18	27. 10	8. 43	·1379					
13. 22	26. 55	9. 13	·1381					
13. 33	27. 35		(†)					
	***	21. 0	·1363*					
14. 24	28. 15	21. 43	·1366					
14. 56	29. 30	22. 11	·1364					
15. 36	28. 0	22. 43	·1366					
15. 40	28. 15	23. 29	·1363					
15. 58	27. 35	23. 59	·1365					
16. 11	27. 20							
16. 22	27. 55							
16. 39	27. 55							
16. 59	27. 20							
17. 12	26. 10							
17. 19	26. 40							
17. 28	25. 20							
17. 37	26. 10							
17. 43	26. 0							
18. 0	26. 40							
19. 48	24. 5							
20. 2	24. 30							
20. 14	24. 20							
20. 48	25. 45							
21. 6	25. 50							
22. 4	28. 40							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

May 24. The Horizontal Force trace was lost from 9h. 13m., to 21h. 43m., and the Vertical Force trace was lost from 8h. 56m. to 20h. 56m., through a partial failure in the supply of gas.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 24								
h m	° ′ ″	h m		h m		h m	°	°
22. 51	20. 31. 25							
23. 59	33. 55							
May 25		May 25		May 25		May 25		
0. 0	20. 33. 55	0. 0	·1365	0. 0	·03269	1. 0	58·8	60·2
1. 59	36. 50	0. 50	·1374	5. 28	·03338	3. 0	59·2	60·4
3. 28	35. 0	1. 21	·1378	10. 57	·03320	9. 0	58·6	59·4
3. 44	35. 0	1. 49	·1374	18. 24	·03329	21. 0	58·4	59·0
5. 24	32. 20	2. 8	·1377	22. 21	·03282			
5. 30	32. 50	2. 21	·1374	23. 59	·03297			
6. 21	31. 5	2. 41	·1377					
7. 29	30. 20	2. 50	·1374					
7. 56	30. 55	3. 44	·1373					
8. 16	30. 20		***					
11. 19	30. 20	5. 42	·1380					
11. 34	30. 30	6. 26	·1381					
11. 56	29. 45	7. 11	·1378					
12. 36	29. 40	7. 29	·1380					
12. 58	30. 35	8. 42	·1378					
13. 25	30. 0		(†)					
13. 53	29. 55	9. 0	·1382*					
14. 9	30. 50	10. 23	·1379					
15. 11	28. 50	11. 42	·1377					
15. 53	29. 10	11. 56	·1379					
18. 12	24. 30	12. 40	·1376					
18. 32	24. 50	12. 51	·1379					
19. 2	23. 50	13. 54	·1375					
19. 51	24. 5	14. 11	·1381					
20. 0	23. 30	15. 31	·1372					
20. 13	24. 20	15. 43	·1375					
20. 41	24. 30	18. 57	·1374					
22. 8	29. 5	21. 17	·1366					
22. 55	31. 30	21. 25	·1368					
23. 59	33. 55	22. 41	·1366					
		23. 59	·1372					
May 26		May 26		May 26		May 26		
0. 0	20. 33. 55	0. 0	·1372	0. 0	·03297	1. 0	59·4	61·4
0. 54	34. 25	0. 25	·1373	4. 24	·03383	3. 0	60·1	62·2
2. 30	33. 55	0. 54	·1378	7. 12	·03406	9. 0	59·5	61·3
4. 20	32. 10	1. 13	·1375	8. 44	·03360	22. 0	59·8	61·7
4. 39	32. 10	2. 29	·1381	11. 53	·03398			
6. 18	30. 45	2. 59	·1377	15. 34	·03417			
7. 51	30. 55	3. 13	·1380	20. 12	·03403			
7. 57	30. 30	3. 27	·1377	23. 23	·03360			
8. 18	31. 10	3. 59	·1380	23. 59	·03363			
9. 10	30. 35	4. 27	·1377					
9. 16	31. 5	5. 20	·1382					
11. 14	30. 40	6. 5	·1381					
11. 40	31. 10	6. 51	·1383					
11. 51	31. 0	7. 14	·1380					
13. 47	29. 30	7. 36	·1384					
14. 21	29. 30	7. 52	·1382					
14. 53	28. 55	8. 59	·1381					
18. 53	25. 55	9. 13	·1384					
19. 13	26. 0	9. 42	·1382					
19. 44	25. 0	10. 3	·1384					
20. 11	25. 20	10. 24	·1381					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 26		May 26						
h m	° ′ ″	h m		h m		h m	°	°
20. 22	20. 26. 30	11. 19	·1384					
21. 26	26. 35	11. 27	·1380					
22. 30	29. 50	11. 41	·1384					
23. 30	33. 55	12. 7	·1381					
23. 59	35. 20	12. 15	·1383					
		13. 44	·1381					
		13. 54	·1378					
		14. 24	·1381					
		17. 43	·1379					
		19. 56	·1366					
		20. 20	·1367					
		20. 33	·1364					
		21. 23	·1363					
		21. 54	·1365					
		22. 20	·1362					
		22. 51	·1362					
		22. 56	·1367					
		23. 0	·1365					
		23. 25	·1369					
		23. 42	·1368					
			(†)					
May 27		May 27		May 27		May 27		
0. 0	20. 35. 20		(†)	0. 0	·03363	1. 0	60·4	61·6
1. 0	37. 25	0. 24	·1373	5. 12	·03439	8. 30	60·7	62·4
2. 9	36. 35	0. 55	·1376	10. 57	·03457	21. 0	59·8	60·7
2. 56	35. 0	1. 20	·1374	16. 50	·03438			
3. 28	33. 30	1. 44	·1378	21. 23	·03396			
5. 0	31. 15	2. 30	·1376	22. 12	·03401			
6. 4	30. 55	3. 34	·1379	23. 59	·03400			
7. 29	30. 0	4. 41	·1383					
8. 24	30. 40	6. 14	·1385					
8. 33	29. 40	7. 53	·1381					
8. 53	28. 40	8. 8	·1385					
9. 22	28. 40	8. 34	·1383					
9. 39	30. 10	8. 54	·1386					
10. 13	29. 35	9. 11	·1381					
10. 30	30. 0		***					
10. 46	29. 30	10. 31	·1378					
11. 30	30. 10	10. 41	·1381					
12. 14	29. 45	10. 51	·1377					
12. 44	30. 0	11. 26	·1377					
13. 33	29. 10	11. 41	·1379					
13. 43	29. 45	11. 54	·1377					
14. 0	28. 55	15. 43	·1378					
15. 56	27. 35	16. 25	·1376					
16. 22	28. 20		***					
16. 39	28. 20	17. 23	·1379					
16. 53	29. 10	17. 40	·1376					
17. 0	27. 25	17. 51	·1380					
17. 26	26. 0	18. 11	·1377					
17. 36	26. 0	18. 36	·1382					
17. 41	27. 5	19. 42	·1370					
17. 46	25. 10	19. 51	·1372					
18. 5	24. 0	20. 11	·1366					
18. 23	26. 0	20. 14	·1368					
18. 39	25. 30	20. 44	·1356					
18. 48	24. 30	20. 55	·1357					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 27		May 27						
h m	° ′ ″	h m		h m		h m	°	°
19. 14	20. 22. 40	21. 11	·1352					
19. 29	22. 25	21. 27	·1348					
19. 39	23. 55	21. 30	·1353					
19. 52	22. 10	21. 39	·1348					
19. 59	22. 15	21. 42	·1350					
20. 6	24. 20	21. 54	·1346					
20. 12	23. 10	22. 26	·1349					
20. 15	23. 25	22. 50	·1366					
20. 27	22. 30	22. 59	·1361					
20. 31	24. 10	23. 4	·1368					
20. 35	22. 40	23. 11	·1361					
	***	23. 37	·1350					
20. 56	25. 10	23. 59	·1358					
21. 8	25. 10							
21. 31	29. 30							
21. 37	29. 15							
21. 39	30. 5							
21. 44	29. 20							
21. 53	31. 20							
21. 59	31. 55							
22. 9	33. 10							
22. 28	33. 10							
23. 6	37. 10							
23. 25	37. 50							
23. 40	37. 30							
23. 55	38. 0							
23. 59	37. 45							
May 28		May 28		May 28		May 28		
0. 0	20. 37. 45	0. 0	·1358	0. 0	·03400	1. 0	60 ·6	62 ·0
0. 23	37. 0	0. 17	·1365	1. 23	·03408	3. 0	59 ·9	62 ·1
0. 32	37. 20	0. 27	·1370	1. 53	·03434	9. 0	60 ·9	62 ·0
0. 40	36. 10	0. 49	·1375	3. 13	·03457	21. 0	58 ·8	59 ·9
0. 43	37. 55	1. 12	·1365	4. 57	·03497			
0. 53	37. 10	1. 25	·1368	6. 26	·03518			
1. 23	37. 0	1. 51	·1385	6. 43	·03505			
1. 45	39. 50	2. 0	·1384	7. 6	·03520			
1. 50	39. 0	2. 21	·1369	9. 21	·03496			
1. 56	39. 50	2. 43	·1356	11. 22	·03426			
2. 5	39. 0	2. 48	·1358	11. 53	·03400			
2. 21	39. 40	2. 56	·1354	12. 7	·03406			
2. 39	38. 30	3. 28	·1369	12. 26	·03371			
2. 44	39. 0	3. 41	·1365	12. 57	·03364			
2. 53	37. 55	4. 0	·1371	13. 50	·03352			
3. 3	38. 0	4. 17	·1383	14. 12	·03360			
3. 39	35. 30	4. 29	·1377	14. 44	·03335			
3. 56	35. 10	4. 41	·1380	16. 34	·03312			
4. 6	36. 5	5. 6	·1368	17. 30	·03306			
4. 12	36. 10	5. 25	·1380	19. 12	·03320			
4. 29	34. 0	5. 48	·1386	21. 8	·03303			
4. 40	34. 0	6. 10	·1384	22. 26	·03335			
5. 7	32. 5	6. 14	·1390	23. 59	·03338			
6. 6	30. 30	6. 34	·1383					
6. 13	31. 15	6. 40	·1378					
6. 23	30. 10	6. 44	·1374					
6. 29	30. 10	7. 11	·1386					
6. 54	22. 40	7. 25	·1381					
7. 14	25. 15	7. 29	·1384					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 28		May 28						
h m	° ′ ″	h m		h m		h m	°	°
7. 28	20. 26. 40	7. 42	·1375					
7. 46	29. 55	7. 53	·1378					
	***	8. 22	·1379					
8. 40	30. 50	8. 56	·1378					
8. 54	30. 30	9. 10	·1375					
9. 55	30. 20	9. 56	·1373					
10. 29	31. 10	10. 32	·1380					
10. 59	29. 40	10. 42	·1381					
11. 9	29. 55	10. 49	·1377					
11. 18	29. 10	11. 11	·1373					
11. 35	31. 15	11. 24	·1370					
11. 46	28. 15	11. 42	·1386					
12. 13	34. 0	12. 12	·1374					
12. 25	32. 45	12. 35	·1384					
12. 34	29. 10	13. 0	·1381					
12. 55	26. 30	13. 12	·1384					
13. 9:	28. 10	14. 6	·1361					
13. 38	24. 30	14. 27	·1376					
13. 58	27. 40	15. 0	·1376					
14. 3	30. 10	15. 20	·1371					
14. 20	31. 40	15. 55	·1367					
14. 28	31. 45	16. 22	·1373					
14. 48	26. 40	16. 33	·1368					
15. 18	25. 5	17. 35	·1370					
15. 23	26. 10	17. 56	·1366					
15. 39	25. 35	18. 23	·1369					
15. 58	25. 55	21. 15	·1358					
16. 12	27. 0	21. 29	·1362					
16. 22	24. 55	22. 12	·1351					
16. 42	27. 0	22. 36	·1359					
16. 47	27. 0	22. 47	·1353					
17. 4	28. 25	23. 11	·1358					
	***	23. 30	·1361					
17. 51	26. 55	23. 59	·1366					
18. 10	27. 0							
18. 16	26. 10							
18. 44	26. 0							
19. 12	26. 35							
19. 16	25. 55							
20. 28	26. 25							
20. 48	27. 0							
21. 15	29. 10							
21. 23	29. 0							
21. 45	30. 55							
22. 11	31. 25							
22. 37	34. 0							
22. 42	33. 20							
23. 9	35. 30							
23. 59	36. 0							
May 29		May 29		May 29		May 29		
0. 0	20. 36. 0	0. 0	·1366	0. 0	·03338	1. 0	60 ·1	62 ·4
0. 28	36. 50	0. 39	·1370	3. 43	·03419	3. 0	60 ·3	61 ·8
0. 38	37. 40	1. 6	·1366	5. 56	·03444	6. 30	60 ·6	62 ·0
1. 14	38. 50	1. 38	·1362	7. 4	·03443	9. 0	58 ·6	59 ·5
1. 39	38. 30	1. 53	·1366	9. 33	·03362	21. 0	57 ·3	58 ·0
	***	2. 32	·1374	10. 27	·03358	22. 0	57 ·9	59 ·5
2. 29	38. 30	3. 27	·1371	12. 2	·03322	23. 0	58 ·4	60 ·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 29		May 29		May 29				
h m	° ′ ″	h m		h m		h m	°	°
3. 1	20. 37. 20	4. 9	·1376	13. 13	·03315			
4. 4	34. 30	4. 18	·1374	13. 54	·03280			
4. 23	34. 20	4. 29	·1378	14. 56	·03238			
5. 21	30. 50	4. 54	·1371	18. 5	·03222			
5. 51	31. 0	5. 15	·1376	23. 59	·03244			
6. 55	30. 0	5. 41	·1381					
8. 2	29. 50	5. 43	·1379					
9. 6	30. 20	5. 55	·1383					
9. 14	30. 55	6. 22	·1376					
9. 38	28. 0	6. 41	·1378					
9. 54	27. 30	6. 55	·1369					
9. 58	28. 5	7. 20	·1372					
10. 13	28. 0	7. 50	·1368					
10. 38	24. 40	9. 4	·1373					
10. 49	21. 0	9. 20	·1380					
11. 1	22. 0	10. 13	·1376					
11. 12	25. 25	10. 35	·1371					
11. 16	25. 15	10. 41	·1376					
11. 43	29. 55	10. 46	·1374					
12. 14	28. 45	11. 9	·1384					
12. 25	29. 10	11. 27	·1363					
12. 33	28. 50	12. 0	·1374					
12. 40	29. 40	12. 41	·1369					
12. 57	28. 30	13. 13	·1370					
13. 11	29. 40	13. 18	·1374					
13. 26	29. 50	13. 42	·1369					
14. 0	33. 50	14. 40	·1376					
14. 9	33. 50	15. 26	·1368					
14. 19	32. 10	15. 55	·1370					
14. 26	31. 50	16. 12	·1364					
14. 55	27. 35	16. 43	·1368					
15. 11	29. 10	17. 7	·1364					
15. 31	28. 35	17. 27	·1368					
15. 55	28. 35	17. 56	·1368					
16. 5	27. 10	18. 11	·1370					
16. 32	26. 20	19. 13	·1360					
16. 40	27. 25	19. 29	·1363					
16. 51	27. 10	20. 19	·1355					
17. 10	25. 5	20. 42	·1356					
17. 32	25. 40	21. 43	·1351					
17. 49	24. 10	22. 0	·1339					
18. 1	24. 55		***					
	***	22. 31	·1337					
19. 4	24. 55		***					
19. 17	23. 15	23. 12	·1348					
19. 26	24. 50	23. 59	·1349					
19. 48	24. 10							
20. 4	24. 20							
20. 17	23. 45							
	***							
20. 53	24. 55							
21. 56	27. 0							
23. 53	35. 15							
23. 59	35. 30							
May 30		May 30		May 30		May 30		
0. 0	20. 35. 30	0. 0	·1349	0. 0	·03244	0. 0	58·7	60·0
1. 43	37. 10	0. 26	·1350	2. 55	·03307	1. 0	58·9	61·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 30		May 30		May 30		May 30		
h m	° ′ ″	h m		h m		h m		
3. 0	20. 34. 50	0. 44	·1360	3. 19	·03368	2. 0	59·3	61·0
3. 38	35. 0	0. 56	·1373	8. 54	·03384	3. 0	59·8	62·0
4. 42	33. 15	1. 16	·1379	9. 55	·03325	9. 0	57·5	58·0
4. 59	32. 55	2. 23	·1388	12. 12	·03322	21. 0	58·8	60·0
5. 4	33. 40	2. 38	·1383	15. 12	·03340	22. 0	59·0	60·0
5. 25	32. 15	2. 45	·1394	18. 57	·03334	23. 0	59·3	60·5
5. 34	31. 0	3. 11	·1397	22. 11	·03299			
6. 9	29. 35	3. 28	·1389	23. 14	·03277			
6. 22	28. 5	3. 43	·1382	23. 59	·03279			
7. 42	29. 30	4. 43	·1382					
7. 58	28. 55	4. 57	·1378					
8. 51	30. 0	5. 25	·1377					
9. 18	29. 10	6. 0	·1381					
9. 30	29. 40	7. 14	·1385					
10. 6	28. 25	7. 54	·1382					
10. 28	29. 5	8. 8	·1377					
10. 40	30. 30	8. 43	·1380					
11. 3	28. 50	9. 11	·1374					
11. 13	30. 0	9. 40	·1377					
11. 37	29. 40	10. 41	·1376					
12. 2	28. 0	10. 45	·1382					
13. 12	28. 55	11. 11	·1377					
13. 43	28. 25	11. 56	·1384					
14. 51	29. 20	12. 30	·1377					
15. 43	29. 25	13. 4	·1376					
15. 56	28. 40	14. 11	·1379					
16. 3	28. 40	15. 26	·1375					
16. 20	27. 30	16. 44	·1379					
16. 28	27. 30	20. 59	·1366					
	***	21. 12	·1360					
17. 19	25. 30	21. 19	·1364					
17. 32	25. 50		***					
	***	23. 27	·1362					
18. 27	25. 25	23. 43	·1369					
18. 33	24. 50	23. 59	·1372					
18. 42	25. 55							
18. 51	25. 20							
19. 46	25. 20							
20. 24	26. 0							
20. 53	25. 55							
21. 57	27. 55							
22. 59	31. 20							
23. 59	34. 25							
May 31		May 31		May 31		May 31		
0. 0	20. 34. 25	0. 0	·1372	0. 0	·03279	0. 0	59·5	61·1
0. 29	35. 20	0. 12	·1374	1. 25	·03314	1. 0	59·8	61·9
0. 44	35. 20	0. 29	·1371	4. 11	·03397	2. 0	60·2	62·3
1. 13	35. 55	0. 56	·1378	7. 14	·03388	3. 0	60·2	62·4
2. 26	35. 0	1. 9	·1380	19. 57	·03356	9. 0	59·4	61·0
2. 50	35. 10	1. 55	·1384	21. 11	·03343	21. 0	59·7	60·4
4. 33	32. 15	2. 13	·1391	23. 59	·03376			
6. 55	32. 5	2. 26	·1386					
7. 33	31. 20	2. 38	·1389					
11. 54	29. 5	2. 43	·1387					
12. 18	29. 50	3. 20	·1389					
12. 27	30. 15	3. 25	·1387					
12. 51	29. 30	3. 37	·1390					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
May 31		May 31						
h m	° ′ ″	h m		h m		h m	°	°
13. 58	20. 29. 45	4. 9	·1386					
14. 25	28. 0	4. 26	·1390					
14. 46	27. 40	5. 15	·1385					
15. 32	29. 50	5. 41	·1389					
16. 38	26. 25	6. 56	·1390					
16. 46	26. 30	7. 11	·1387					
17. 10	25. 45	7. 34	·1389					
17. 23	26. 0	8. 40	·1386					
18. 43	24. 5	10. 26	·1388					
19. 15	25. 10	10. 56	·1385					
19. 40	24. 55	11. 42	·1389					
20. 56	26. 20	12. 14	·1386					
22. 10	29. 10	12. 43	·1388					
22. 58	31. 40	13. 42	·1385					
23. 9	31. 35	13. 56	·1388					
23. 23	32. 10	15. 26	·1382					
23. 29	31. 45	15. 56	·1385					
23. 50	32. 55	19. 23	·1380					
23. 59	32. 35	21. 27	·1369					
		22. 12	·1367					
		23. 24	·1374					
		23. 38	·1372					
		23. 43	·1376					
		23. 59	·1374					
June 1		June 1		June 1		June 1		
0. 0	20. 32. 35	0. 0	·1374	0. 0	·03376	1. 0	60·5	62·1
0. 15	32. 45	0. 25	·1375	0. 26	·03381	3. 0	60·6	62·1
0. 17	31. 20	0. 43	·1377	4. 16	·03442	9. 0	60·1	60·8
0. 20	32. 0	1. 14	·1387	9. 6	·03460	21. 0	60·3	61·1
0. 46	31. 25	1. 33	·1382	9. 42	·03438			
1. 16	33. 5	1. 43	·1385	12. 12	·03403			
1. 33	32. 10	2. 45	·1387	12. 52	·03406			
1. 40	32. 30	2. 56	·1384	15. 55	·03403			
3. 8	31. 25	3. 11	·1386	22. 43	·03384			
3. 43	31. 45	3. 47	·1387		(†)			
3. 58	30. 55	4. 11	·1384					
5. 57	30. 0	4. 42	·1391					
6. 20	30. 30	5. 3	·1389					
7. 57	30. 20	5. 12	·1391					
8. 9	29. 55	5. 24	·1388					
10. 0	29. 30	5. 55	·1388					
10. 39	27. 55	6. 5	·1391					
10. 56	28. 40	6. 26	·1394					
11. 17	27. 30	6. 33	·1392					
11. 50	28. 20	6. 44	·1398					
12. 11	26. 30	7. 12	·1388					
12. 32	26. 50	7. 32	·1392					
12. 47	30. 5	8. 40	·1388					
12. 59	30. 5	8. 56	·1393					
13. 28	28. 25	9. 26	·1389					
13. 45	29. 10	10. 41	·1387					
14. 44	27. 35	10. 54	·1392					
15. 9:	28. 15	11. 40	·1386					
15. 36	26. 55	12. 6	·1393					
15. 54	26. 55	12. 43	·1385					
17. 24	24. 40	13. 25	·1388					
18. 23	24. 10	13. 55	·1383					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet	Of V. F. Magnet.
June 1		June 1						
h m	° ′ ″	h m		h m		h m	°	°
18. 39	20. 24. 25	15. 42	·1385					
18. 59	23. 35	17. 11	·1384					
19. 16	24. 10	19. 54	·1371					
19. 33	23. 50	20. 10	·1373					
20. 20	25. 50	20. 39	·1367					
20. 43	25. 35	21. 12	·1365					
21. 24	27. 20	21. 20	·1368					
21. 49	27. 30	21. 40	·1366					
22. 37	30. 50	22. 47	·1373					
22. 56	31. 20	22. 56	·1373					
	(†)		(†)					
June 2		June 2		June 2		June 2		
	(†)		(†)		(†)	1. 0	62·7	65·0
1. 0	20. 36. 12*	1. 0	·1368*	1. 0	·03460*	3. 0	63·0	64·1
3. 0	34. 39*	3. 0	·1380*	3. 0	·03501*	9. 0	63·3	64·6
5. 39	29. 40	5. 38	·1378	5. 30	·03620	21. 30	62·4	63·8
7. 51	29. 30	5. 45	·1386	6. 39	·03655			
8. 26	29. 55		***	8. 48	·03614			
8. 45	29. 20	7. 14	·1389	9. 11	·03618			
9. 26	29. 10	7. 28	·1386	11. 40	·03546			
9. 41	29. 40	7. 57	·1389	12. 26	·03519			
9. 56	28. 35	8. 42	·1384	19. 40	·03529			
10. 5	29. 10	8. 57	·1388	20. 57	·03512			
10. 19	28. 35	9. 25	·1383	22. 39	·03522			
10. 58	28. 35	9. 41	·1387	23. 10	·03505			
11. 25	26. 20	9. 55	·1381	23. 59	·03523			
11. 39	28. 0	10. 21	·1384					
11. 59	28. 10	10. 42	·1383					
12. 25	26. 40	11. 12	·1392					
12. 30	27. 5	11. 24	·1387					
13. 3	26. 25	11. 43	·1389					
13. 26	27. 25	11. 56	·1396					
15. 6	27. 35	12. 35	·1384					
16. 26	25. 50	13. 11	·1379					
17. 32	23. 40	17. 35	·1385					
17. 56	23. 40	21. 4	·1370					
19. 8	22. 30	21. 57	·1367					
19. 13	23. 0	22. 12	·1363					
19. 26	22. 40	22. 27	·1364					
21. 33	25. 30	22. 41	·1366					
22. 19	27. 50	23. 12	·1367					
23. 59	33. 15	23. 59	·1366					
June 3		June 3		June 3		June 3		
0. 0	20. 33. 15	0. 0	·1366	0. 0	·03523	0. 0	63·1	63·8
1. 15:	35. 20	2. 40	·1381	3. 43	·03554	9. 8	63·6	65·0
2. 7	35. 20	2. 56	·1380	5. 10	·03588	21. 0	63·1	65·0
2. 14	34. 30	5. 43	·1392	10. 54	·03590			
2. 22	34. 50	6. 9	·1391	20. 19	·03557			
4. 22	32. 10	6. 41	·1393	21. 27	·03536			
6. 10	29. 45	8. 56	·1388	23. 59	·03543			
7. 12	28. 40	9. 40	·1390					
8. 38	29. 35	10. 7	·1387					
9. 57	29. 0	10. 22	·1389					
10. 25	29. 35	10. 45	·1387					
10. 43	29. 35	11. 12	·1389					
11. 12	30. 5	11. 26	·1394					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 3		June 3						
h m	° ′ ″	h m		h m		h m	°	°
11. 19	20. 28. 30	11. 43	·1389					
11. 43	27. 40	12. 54	·1384					
11. 50	27. 50	12. 57	·1387					
12. 11	27. 45	13. 44	·1382					
12. 28	27. 40	16. 52	·1386					
12. 42	26. 40	18. 12	·1384					
12. 48	27. 40	18. 37	·1382					
13. 6	27. 40	18. 41	·1382					
13. 27	26. 20	19. 6	·1376					
14. 10	27. 20	19. 21	·1378					
14. 25	28. 15	20. 15	·1371					
14. 38	27. 40	20. 59	·1373					
14. 59	27. 30	21. 21	·1368					
15. 17	27. 50	22. 10	·1369					
15. 48	26. 45	22. 41	·1374					
15. 53	27. 10	23. 56	·1373					
16. 3	26. 20	23. 59	·1374					
16. 13	26. 40							
17. 8	26. 10							
17. 29	25. 30							
	***							
18. 12	25. 25							
18. 28	24. 30							
18. 40	24. 30							
18. 49	25. 35							
19. 28	25. 55							
19. 47	25. 25							
20. 8	25. 25							
20. 45	27. 0							
21. 13	26. 50							
22. 10	28. 20							
22. 38	30. 35							
23. 46	34. 20							
23. 55	34. 10							
23. 59	34. 45							
June 4		June 4		June 4		June 4		
0. 0	20. 34. 45	0. 0	·1374	0. 0	·03543	1. 0	63 ·6	65 ·0
0. 56	35. 45	0. 45	·1380	0. 48	·03552	3. 0	64 ·2	65 ·0
1. 59	35. 20	0. 59	·1376	1. 12	·03544	9. 0	59 ·9	61 ·0
2. 16	36. 0	1. 59	·1381	3. 54	·03603	21. 0	60 ·1	62 ·0
4. 29	32. 30	2. 19	·1386	6. 19	·03618			
6. 35	30. 30	2. 36	·1382	7. 38	·03605			
7. 43	30. 30	3. 14	·1383	8. 19	·03592			
8. 56	28. 25	3. 30	·1381	10. 11	·03537			
9. 30	29. 0	3. 56	·1380	13. 10	·03500			
9. 58	28. 20	4. 19	·1383	15. 43	·03464			
11. 16	28. 55	4. 50	·1385	19. 36	·03423			
11. 43	28. 25	5. 12	·1381	22. 58	·03361			
13. 8	28. 15	5. 35	·1385	23. 59	·03337			
13. 16	28. 55	7. 11	·1385					
13. 25	28. 25	7. 26	·1389					
13. 39	29. 55	8. 11	·1384					
14. 0	29. 0	9. 40	·1389					
14. 46	28. 5	9. 59	·1385					
14. 52	28. 15	13. 9	·1382					
15. 33	26. 40	13. 12	·1385					
15. 46	27. 10	13. 30	·1383					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 4		June 4						
h m	° ′ ″	h m		h m		h m	°	°
16. 36	20. 25. 25	16. 9	·1384					
17. 18	26. 15	17. 19	·1381					
17. 29	25. 55	18. 12	·1381					
17. 42	28. 20	18. 43	·1379					
18. 16	25. 0	19. 3	·1380					
18. 28	25. 0	19. 51	·1378					
18. 39	24. 20	20. 6	·1381					
18. 48	24. 50	23. 55	·1369					
19. 8	24. 20	23. 59	·1370					
19. 20	24. 20							
19. 41	25. 20							
19. 59	25. 20							
	***							
20. 54	24. 25							
20. 58	25. 0							
21. 36	24. 55							
22. 13	26. 30							
23. 59	31. 30							
June 5		June 5		June 5		June 5		
0. 0	20. 31. 30	0. 0	·1370	0. 0	·03357	1. 0	61 ·0	62 ·4
1. 56	34. 35	0. 56	·1380	0. 41	·03345	3. 0	61 ·2	62 ·7
2. 26	34. 0	1. 44	·1376	4. 25	·03424	9. 0	58 ·8	59 ·8
3. 26	34. 20	2. 46	·1382	6. 14	·03415	21. 0	58 ·6	59 ·0
4. 15	32. 40	3. 51	·1381	9. 15	·03377	22. 0	58 ·2	58 ·5
4. 27	33. 5	4. 27	·1392	16. 24	·03313	23. 0	58 ·1	58 ·3
4. 48	32. 40	4. 51	·1388	22. 26	·03257			
5. 3	31. 35	5. 8	·1380	23. 19	·03238			
5. 33	31. 50	5. 31	·1386	23. 59	·03238			
6. 44	29. 30	6. 35	·1393					
7. 43	29. 10	6. 51	·1391					
8. 21	29. 20	7. 4	·1395					
9. 10	28. 40	7. 42	·1393					
10. 13	29. 0	9. 56	·1390					
10. 59	28. 30	11. 11	·1385					
11. 26	28. 35	12. 26	·1389					
11. 45	27. 30	12. 56	·1384					
12. 9	28. 25	16. 25	·1385					
12. 39	26. 40	18. 41	·1381					
12. 52	26. 40	19. 45	·1381					
13. 26	27. 40	21. 19	·1376					
13. 42	26. 40	23. 49	·1380					
14. 13	27. 15	23. 59	·1382					
14. 37	26. 25							
14. 58	26. 50							
15. 59	25. 5							
16. 10	25. 15							
16. 30	24. 30							
16. 44	24. 30							
16. 59	23. 30							
17. 44	23. 40							
18. 26	25. 0							
19. 31	24. 30							
19. 56	25. 25							
20. 16	24. 35							
20. 40	25. 20							
21. 0	26. 30							
21. 33	26. 10							

For the Horizontal and **Vertical Forces, increasing readings** denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
June 5	
h m	° ′ ″
22. 30	20. 29. 10
22. 59	30. 30
23. 16	32. 5
23. 59	33. 20
June 6	
0. 0	20. 33. 20
1. 34	35. 20
2 16	34. 45
2. 43	33. 15
3. 25	32. 30
3. 40	32. 55
3. 56	32. 20
4. 10	33. 0
4. 27	32. 20
4. 41	32. 20
	***
5. 12	33. 10
5. 42	31. 25
5. 48	31. 25
6. 16	30. 30
6. 47	30. 35
7. 43	30. 0
8. 10	30. 10
8. 51	29. 20
9. 42	29. 40
10. 4	30. 0
10. 11	30. 20
10. 41	28. 10
11. 36	28. 30
11. 49	29. 30
12. 4	29. 40
12. 32	29. 0
12. 45:	27. 55
13. 16	29. 20
13. 26	28. 20
13. 36	28. 20
13. 43	30. 5
14. 13	27. 25
14. 38	27. 45
14. 58	26. 15
15. 25	23. 25
15. 43	25. 15
15. 56	23. 40
16. 24	24. 40
	***
17. 10	22. 55
	***
17. 45	23. 0
17. 53	23. 50
	***
19. 30	25. 30
20. 4	24. 25
22. 3	29. 40
22. 23	29. 40
23. 25	32. 15
23. 33	31. 50

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
June 6	
0. 0	·1382
0. 55	·1387
1. 12	·1384
1. 41	·1388
1. 56	·1381
2. 13	·1384
2. 24	·1382
3. 24	·1392
3. 44	·1401
3. 56	·1388
4. 15	·1404
4. 41	·1395
4. 56	·1406
5. 0	·1402
5. 12	·1408
5. 41	·1380
6. 40	·1389
7. 24	·1391
7. 45	·1395
7. 56	·1393
8. 11	·1395
8. 41	·1389
10. 4	·1390
10. 25	·1388
10. 58	·1387
12. 10	·1389
12. 18	·1386
12. 34	·1389
12. 54	·1386
13. 36	·1391
13. 49	·1399
14. 11	·1394
14. 41	·1387
14. 55	·1389
15. 40	·1382
16. 35	·1386
17. 12	·1380
17. 31	·1383
19. 56	·1377
21. 22	·1374
23. 13	·1374
23. 25	·1370
23. 45	·1374
23. 59	·1374

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
June 6	
0. 0	·03238
1. 44	·03296
5. 12	·03360
5. 31	·03352
8. 23	·03360
9. 34	·03317
13. 28	·03341
13. 55	·03336
15. 11	·03338
15. 26	·03343
17. 4	·03356
21. 11	·03344
23. 59	·03352

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	
June 6		
0. 0	59 ·2	59 ·5
1. 0	59 ·8	61 ·0
2. 0	60 ·5	60 ·8
3. 0	60 ·3	60 ·8
9. 0	58 ·0	58 ·2
21. 0	60 ·7	62 ·2
22. 0	60 ·7	62 ·5
23. 0	61 ·1	63 ·0

Greenwich Mean Solar Time.	Western Declination.
June 6	
h m	° ′ ″
23. 49	20. 32. 55
23. 59	32. 45
June 7	
0. 0	20. 32. 45
0. 30	32. 25
1. 30	33. 20
3. 32	32. 0
3. 56	30. 25
4. 20	29. 45
4. 41	30. 0
5. 9	29. 45
5. 19	30. 5
5. 26	29. 45
10. 49	29. 5
11. 6	29. 30
11. 33	27. 45
11. 51	28. 15
12. 29	27. 45
12. 53	28. 5
13. 3	27. 50
13. 21	29. 5
13. 35	27. 45
13. 43	27. 30
14. 40	27. 55
15. 24	26. 0
15. 37	26. 55
16. 29	24. 20
16. 48	24. 20
16. 56	23. 30
17. 23	23. 30
17. 33	22. 50
17. 43	23. 25
17. 53	23. 10
18. 9	24. 0
19. 8	24. 0
20. 26	25. 0
22. 8	28. 30
22. 58	31. 5
23. 59	32. 20
June 8	
0. 0	20. 32. 20
1. 39	33. 50
3. 10	32. 10
4. 55	30. 30
6. 8	30. 0
6. 36	28. 40
6. 56	29. 10
8. 9	29. 5
9. 32	29. 40
11. 34	28. 45
13. 19	27. 30
14. 9	27. 25
15. 19	26. 20
15. 40	26. 30
16. 29	24. 55
17. 18	23. 40

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
June 7	
0. 0	·1374
0. 36	·1370
1. 20	·1374
1. 45	·1371
2. 17	·1376
2. 42	·1379
3. 11	·1381
3. 49	·1368
	***
6. 0	·1390
6. 44	·1386
9. 27	·1382
9. 57	·1384
10. 41	·1381
11. 4	·1384
11. 48	·1382
13. 14	·1378
17. 56	·1381
19. 13	·1377
20. 59	·1370
22. 10	·1369
23. 12	·1373
23. 59	·1376
June 8	
0. 0	·1376
0. 42	·1374
2. 6	·1374
2. 29	·1377
3. 11	·1370
3. 17	·1373
3. 33	·1371
4. 25	·1379
5. 12	·1379
5. 38	·1373
5. 50	·1379
6. 26	·1379
7. 10	·1385
7. 43	·1382
7. 56	·1385
8. 19	·1383

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
June 7	
0. 0	·03352
0. 38	·03366
2. 56	·03422
4. 27	·03458
6. 51	·03460
9. 26	·03485
13. 34	·03435
19. 38	·03424
23. 59	·03420
June 8	
0. 0	·03420
5. 0	·03543
9. 53	·03572
15. 42	·03397
18. 4	·03334
21. 19	·03380
23. 59	·03403

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
June 7		
0. 0	61 ·4	62 ·4
1. 0	61 ·6	63 ·3
2. 0	61 ·7	63 ·5
3. 0	61 ·9	64 ·0
9. 0	62 ·5	64 ·1
21. 0	62 ·2	63 ·6
June 8		
1. 0	63 ·2	65 ·0
3. 0	63 ·3	65 ·4
9. 0	64 ·2	66 ·0
21. 0	61 ·2	62 ·0

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 8		June 8						
h m	° ′ ″	h m		h m		h m	°	°
19. 39	20. 23. 55	15. 11	·1379					
20. 23	25. 0	18. 59	·1381					
20. 35	24. 35		***					
21. 47	27. 55	19. 56	·1378					
22. 12	28. 40	21. 24	·1378					
23. 52	33. 30	22. 14	·1374					
23. 59	33. 45	23. 59	·1372					
June 9		June 9		June 9		June 9		
0. 0	20. 33. 45	0. 0	·1372	0. 0	·03403	1. 0	63·5	63·9
2. 40	35. 0	1. 54	·1370	1. 11	·03414	3. 0	63·5	64·7
5. 46	28. 55	2. 12	·1374	5. 8	·03527	9. 0	64·4	65·9
7. 34	28. 5	2. 19	·1372	10. 26	·03586	11. 0	64·6	65·8
8. 10	28. 25	2. 26	·1375	16. 40	·03579	21. 20	64·5	66·1
8. 59	27. 30	3. 18	·1372	19. 36	·03582			
9. 54	28. 30	5. 45	·1382	21. 33	·03543			
10. 26	27. 20	8. 12	·1387	23. 59	·03597			
10. 54	28. 30	8. 55	·1383					
11. 21	28. 50	11. 44	·1375					
12. 53	28. 20	13. 12	·1378					
13. 18	28. 30	18. 10	·1373					
15. 15	27. 5	20. 0	·1364					
15. 32	27. 20	21. 8	·1366					
16. 46	25. 20	21. 55	·1362					
16. 54	25. 50	22. 12	·1367					
16. 59	24. 35	22. 30	·1363					
17. 8	25. 0	23. 15	·1368					
18. 55	21. 30	23. 18	·1367					
19. 24	21. 45	23. 59	·1366					
21. 21	26. 5							
21. 51	27. 50							
21. 57	29. 20							
22. 26	30. 5							
23. 59	35. 10							
June 10		June 10		June 10		June 10		
0. 0	20. 35. 10	0. 0	·1366	0. 0	·03597	0. 15	65·7	67·1
0. 39	36. 10	1. 26	·1368	0. 58	·03638	6. 30	66·1	68·0
1. 39	36. 10	2. 15	·1364	3. 42	·03672	9. 10	64·1	66·0
2. 23	35. 10	2. 38	·1368	7. 40	·03698	21. 0	63·0	64·0
2. 29	35. 25	3. 35	·1374	12. 26	·03597			
4. 34	31. 45	3. 57	·1373	17. 27	·03502			
5. 22	30. 40		***	20. 42	·03513			
6. 4	30. 15	6. 22	·1386	23. 59	·03491			
6. 17	29. 55	6. 34	·1390					
8. 11	28. 40	8. 55	·1393					
9. 51	29. 30	11. 11	·1387					
10. 43	28. 30	11. 22	·1382					
11. 6	28. 30	11. 42	·1386					
11. 32	27. 40	12. 8	·1387					
12. 0	27. 40	12. 12	·1384					
	***	12. 41	·1387					
12. 59	27. 20	13. 22	·1379					
13. 16	27. 40	13. 49	·1383					
13. 26	27. 10	14. 6	·1380					
13. 54	27. 40		***					
14. 3	27. 30	16. 41	·1383					
14. 29	27. 40	17. 30	·1379					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 10		June 10						
h m	° ′ ″	h m		h m		h m	°	°
15. 6	20. 27. 20	18. 0	·1382					
15. 26	27. 30	18. 41	·1373					
15. 43	26. 55	18. 55	·1373					
15. 55	27. 30	19. 21	·1369					
16. 16	26. 30	19. 42	·1365					
	***	20. 9	·1363					
16. 54	25. 30	20. 13	·1367					
17. 0	26. 0	20. 25	·1365					
	***	20. 45	·1372					
17. 33	25. 0	21. 4	·1369					
17. 51	25. 30	21. 39	·1368					
18. 14	23. 55	21. 54	·1372					
18. 23	24. 40	22. 3	·1369					
18. 34	22. 25	22. 30	·1373					
	***	22. 44	·1368					
18. 51	24. 10	22. 59	·1365					
19. 11	22. 35	23. 30	·1371					
19. 26	22. 45	23. 59	·1370					
19. 28	22. 0							
19. 39	22. 0							
19. 57	23. 30							
20. 10	25. 55							
20. 15	25. 20							
20. 22	25. 50							
20. 26	25. 30							
20. 40	28. 25							
	***							
21. 9	29. 30							
21. 44	28. 30							
22. 2	29. 35							
22. 14	29. 20							
22. 49	31. 20							
22. 55	30. 40							
23. 41	34. 10							
23. 59	34. 5							
June 11		June 11		June 11		June 11		
0. 0	20. 34. 5	0. 0	·1370	0. 0	·03491	1. 0	64·2	65·8
0. 54	34. 10	0. 11	·1371	1. 26	·03519	3. 0	64·1	65·0
0. 59	35. 30	0. 41	·1370	5. 36	·03591	9. 0	63·9	64·5
1. 8	35. 10	0. 56	·1375	9. 26	·03565	21. 0	61·7	63·0
1. 31	37. 50	1. 0	·1381	11. 4	·03483			
1. 44	36. 5	1. 11	·1378	11. 56	·03407			
1. 59	36. 40	1. 33	·1385	12. 24	·03411			
2. 15	36. 0	1. 51	·1368	17. 23	·03338			
2. 24	36. 15	2. 0	·1369	22. 5	·03366			
2. 43	35. 10	2. 15	·1362	22. 58	·03349			
3. 25	33. 55	2. 29	·1367	23. 59	·03355			
3. 39	34. 25	2. 35	·1363					
3. 56	34. 25	3. 25	·1370					
4. 10	33. 5	3. 42	·1380					
4. 26	32. 5	4. 5	·1387					
4. 44	32. 5	4. 28	·1374					
6. 39	28. 20	4. 54	·1384					
7. 25	28. 30	5. 18	·1384					
7. 49	27. 40	6. 20	·1379					
8. 18	28. 20	7. 0	·1386					
8. 46	28. 20	7. 15	·1381					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 11		June 11						
h m	° ′ ″	h m		h m		h m	°	°
9. 26	20. 24. 5	7. 38	·1382					
	***	7. 55	·1379					
10. 8	24. 20	8. 22	·1382					
10. 23	25. 40	9. 15	·1376					
10. 41	25. 40	9. 55	·1378					
10. 54	24. 30	10. 43	·1372					
11. 14	34. 10	11. 18	·1385					
11. 19	34. 10	12. 22	·1374					
12. 30	22. 0	12. 54	·1380					
12. 51	22. 30	13. 38	·1373					
13. 8	21. 40	16. 43	·1378					
13. 44	24. 20	17. 0	·1382					
13. 55	24. 20	17. 25	·1378					
14. 19	25. 10	18. 12	·1367					
14. 34	24. 10	19. 35	·1367					
14. 59	26. 10	19. 45	·1373					
15. 26	25. 20	20. 43	·1371					
15. 39	25. 30	21. 0	·1374					
16. 0	23. 40	21. 27	·1371					
16. 8	23. 40	21. 38	·1374					
16. 53	20. 30	22. 50	·1376					
17. 0	21. 0	23. 32	·1370					
17. 32;	19. 50	23. 45	·1374					
17. 51	21. 20	23. 50	·1373					
18. 7	21. 55	23. 59	·1378					
18. 13	21. 45							
18. 37	23. 35							
18. 58	22. 40							
19. 11	22. 55							
19. 30	21. 55							
19. 47	24. 15							
	***							
20. 8	23. 0							
	***							
20. 41	23. 0							
20. 57	24. 35							
21. 15	25. 35							
21. 26	25. 35							
22. 5	28. 40							
22. 58	30. 5							
23. 24	31. 0							
23. 35	30. 40							
23. 59	31. 20							
June 12		June 12		June 12		June 12		
0. 0	20. 31. 20	0. 0	·1378	0. 0	·03355	1. 0	62 ·6	63 ·2
0. 9	31. 30	0. 26	·1379	2. 26	·03427	3. 0	61 ·8	62 ·9
0. 22	32. 30	0. 49	·1376	4. 18	·03438	9. 0	58 ·6	59 ·7
1. 43	34. 35	1. 1	·1379	8. 52	·03363	21. 0	59 ·1	59 ·7
2. 11	34. 20	1. 18	·1374	11. 43	·03303	22. 0	59 ·2	59 ·2
	***	1. 35	·1376	13. 0	·03262	23. 0	59 ·6	60 ·3
2. 33	35. 15	1. 54	·1384	13. 41	·03228			
3. 13	35. 5	2. 14	·1382	14. 11	·03220			
	***	3. 11	·1395	15. 19	·03177			
3. 38	32. 20	4. 26	·1394	15. 42	·03180			
	***	5. 11	·1385	17. 26	·03163			
4. 9	30. 50	5. 56	·1396	20. 55	·03197			
4. 28	32. 5	6. 27	·1388	22. 26	·03193			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 12		June 12		June 12				
h m	° ′ ″	h m		h m		h m	°	°
5. 13	20. 31. 25	7. 25	·1394	23. 59	·03215			
5. 59	31. 10	7. 54	·1382					
6. 26	29. 55	9. 43	·1381					
6. 49	29. 45	11. 42	·1371					
6. 56	28. 30	12. 14	·1381					
7. 9	28. 35	12. 46	·1373					
7. 23	27. 55	13. 23	·1390					
7. 39	28. 10	13. 52	·1385					
7. 58	26. 35	14. 12	·1398					
8. 7	27. 15	17. 6	·1382					
8. 24	25. 55	17. 25	·1375					
8. 33	26. 10	19. 19	·1370					
8. 52	25. 25	19. 41	·1373					
9. 13	26. 0	20. 27	·1363					
9. 39	25. 20	21. 13	·1363					
9. 52	26. 10	22. 0	·1367					
10. 10	23. 0	22. 43	·1366					
10. 24	23. 10	23. 23	·1372					
10. 53	19. 45	23. 59	·1382					
11. 4	21. 5							
11. 35	19. 40							
12. 7	22. 10							
12. 56;	22. 20							
13. 11	25. 0							
13. 23	24. 0							
13. 49	19. 0							
14. 9	17. 40							
14. 26	17. 50							
14. 57;	19. 40							
15. 8	17. 40							
15. 28	17. 20							
16. 10	22. 45							
16. 41	21. 5							
17. 9	22. 55							
17. 36	22. 40							
17. 47	23. 45							
17. 54	22. 55							
18. 0	24. 0							
18. 38	23. 45							
18. 54	24. 0							
19. 26	22. 50							
19. 39	25. 5							
19. 51	25. 35							
20. 4	25. 20							
20. 12	25. 30							
20. 32	25. 5							
21. 9	27. 50							
21. 39	28. 0							
23. 32	35. 0							
23. 59	35. 50							
June 13		June 13		June 13		June 13		
0. 0	20. 35. 50	0. 0	·1382	0. 0	·03215	0. 0	59 ·7	60 ·0
0. 55	36. 45	0. 9	·1381	3. 23	·03260	1. 0	60 ·2	60 ·6
1. 14	36. 30	0. 26	·1386	7. 9	·03276	3. 0	59 ·4	60 ·0
1. 39	37. 0	0. 51	·1396	9. 12	·03217	9. 0	58 ·0	57 ·0
2. 6	36. 10	1. 10	·1394	13. 14	·03208	12. 35	58 ·1	58 ·3
2. 21	36. 30	1. 43	·1406	14. 12	·03183	19. 0	58 ·2	58 ·2

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 13		June 13		June 13		June 13		
h m	° ′ ″	h m		h m		h m	°	°
2. 40	20. 35. 35	2. 12	·1399	15. 23	·03176	21. 0	59·2	60·1
3. 24	36. 5	2. 45	·1395	17. 28	·03147	22. 30	59·7	61·0
5. 7	33. 10	2. 56	·1397	21. 15	·03182	23. 0	59·8	61·0
5. 33	33. 45	3. 15	·1395	23. 59	·03196			
5. 56	32. 45	3. 34	·1398					
6. 33	29. 30	3. 56	·1394					
6. 43	29. 45	4. 35	·1395					
7. 15	27. 30	4. 54	·1391					
7. 29	27. 55	5. 24	·1398					
7. 34	27. 25	5. 55	·1396					
7. 59	28. 5	6. 4	·1391					
8. 51	27. 25	6. 22	·1396					
9. 12	28. 15	6. 40	·1395					
9. 53	27. 0	7. 0	·1384					
10. 26	27. 50	7. 41	·1391					
10. 49	27. 0	8. 36	·1387					
11. 21	27. 40	9. 3	·1390					
11. 46	26. 20	9. 13	·1394					
12. 6	26. 40	9. 40	·1389					
12. 23	28. 5	10. 11	·1391					
12. 29	28. 0	10. 43	·1385					
12. 41	27. 5	11. 20	·1391					
13. 8	26. 20	12. 25	·1390					
13. 26	27. 25	12. 53	·1386					
13. 33	26. 50	13. 41	·1383					
13. 39	27. 30	14. 14	·1388					
13. 58	28. 10	14. 42	·1387					
14. 18	26. 0	15. 11	·1381					
14. 31	26. 25	15. 57	·1386					
14. 50	26. 15	17. 23	·1380					
15. 25	28. 50	18. 26	·1378					
	* * *	20. 29	·1366					
15. 53	28. 5	23. 19	·1369					
16. 29	25. 40	23. 59	·1372					
16. 41	25. 20							
16. 48	24. 25							
16. 56	25. 10							
17. 8	24. 20							
17. 16	25. 5							
17. 23	24. 30							
18. 13	24. 20							
18. 26	23. 45							
	* * *							
19. 43	23. 20							
21. 6	24. 40							
23. 34	33. 45							
23. 59	34. 35							
June 14		June 14		June 14		June 14		
0. 0	20. 34. 35	0. 0	·1372	0. 0	·03196	0. 0	59·9	62·0
0. 59	34. 55	1. 12	·1375	2. 56	·03280	1. 0	60·8	62·1
1. 11	35. 25	1. 29	·1373	4. 56	·03327	2. 0	61·1	62·2
1. 55	35. 40	2. 8	·1384	9. 29	·03356	3. 0	61·3	63·0
2. 24	34. 30	2. 29	·1384	17. 25	·03242	9. 0	61·6	62·5
3. 26	34. 15	3. 0	·1390	19. 24	·03263	21. 0	60·5	61·0
4. 43	32. 10	3. 14	·1387	23. 59	·03260			
5. 0	31. 30	3. 41	·1391					
5. 14	31. 30	4. 56	·1394					
6. 9	30. 0	5. 12	·1391					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 14		June 14						
h m	° ′ ″	h m		h m		h m		
7. 54	20. 29. 20	5. 25	·1393					
8. 22	28. 35	6. 20	·1388					
8. 32	28. 45	6. 26	·1391					
9. 29	28. 0	6. 43	·1387					
11. 21	27. 45	8. 15	·1382					
13. 8	28. 50	8. 42	·1383					
13. 36	28. 20	9. 25	·1381					
14. 3	28. 30	10. 43	·1385					
14. 21	27. 50	11. 30	·1382					
16. 6	26. 30	13. 56	·1385					
16. 29	25. 20	17. 57	·1383					
17. 4	25. 45	19. 13	·1376					
17. 59	24. 55	20. 9	·1374					
18. 26	23. 20	20. 18	·1377					
	* * *	21. 14	·1370					
19. 25	23. 20	22. 30	·1367					
19. 32	24. 10	23. 35	·1368					
19. 50	23. 55	23. 59	·1372					
19. 58	24. 5							
20. 9	23. 20							
20. 24	24. 10							
20. 29	23. 25							
21. 26	24. 20							
21. 59	25. 55							
22. 21	27. 10							
22. 41	27. 20							
22. 50	27. 55							
23. 49	29. 25							
23. 55	30. 5							
23. 59	30. 5							
June 15		June 15		June 15		June 15		
0. 0	20. 30. 5	0. 0	·1372	0. 0	·03260	1. 0	61·6	62·0
0. 30	31. 50	0. 27	·1377	0. 26	·03258	3. 0	61·3	61·8
0. 38	32. 30	1. 36	·1383	5. 54	·03357	9. 0	61·7	62·7
1. 6	33. 0		* * *	10. 12	·03368	21. 0	60·6	61·0
	* * *	1. 51	·1386	15. 5	·03317			
2. 28	35. 55	2. 14	·1387	16. 53	·03283			
2. 54	35. 20	2. 41	·1392	17. 41	·03242			
3. 7	36. 10	2. 58	·1389	18. 29	·03263			
3. 33	36. 20	3. 21	·1391	21. 59	·03292			
4. 4	36. 0	3. 52	·1389	22. 42	·03280			
4. 36	34. 55	4. 26	·1393	23. 59	·03315			
5. 27	33. 30	5. 9	·1392					
5. 41	33. 40	5. 20	·1394					
6. 8	32. 20	5. 34	·1393					
6. 15	32. 25	5. 50	·1396					
7. 9	30. 55	6. 5	·1394					
7. 26	31. 0	7. 12	·1395					
7. 54	30. 20	7. 33	·1400					
7. 59	31. 5	7. 55	·1399					
8. 16	30. 30	8. 12	·1408					
8. 54	29. 10	9. 0	·1403					
9. 24	29. 20	9. 19	·1407					
9. 38	28. 25	10. 20	·1399					
9. 47	28. 35	11. 52	·1395					
10. 5	27. 50	12. 3	·1401					
10. 36	27. 50		* * *					
10. 54	28. 15	13. 10	·1402					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 15		June 15						
h m	° ′ ″	h m		h		h m	°	°
11. 36	20. 27. 20	13. 43	·1396					
11. 42	27. 20	14. 11	·1388					
11. 51	28. 0		***					
11. 58	27. 5	15. 15	·1392					
12. 47	26. 30	15. 26	·1396					
13. 11	26. 45	16. 4	·1395					
13. 21	27. 35	16. 40	·1386					
	***	16. 55	·1390					
13. 39	28. 0	17. 11	·1400					
14. 1	26. 0	17. 29	·1398					
14. 13	26. 55	17. 59	·1390					
14. 19	26. 30	18. 54	·1391					
14. 41	27. 45	20. 22	1376					
14. 49	27. 25	20. 43	·1372					
14. 59	27. 55	21. 19	·1365					
15. 12	26. 5	21. 26	·1372					
15. 24	27. 45	22. 10	·1362					
15. 33	27. 20	22. 21	·1368					
15. 51	27. 35	22. 50	·1349					
15. 59	28. 5	23. 12	·1337					
16. 10	26. 0	23. 49	·1342					
16. 37	30. 5	23. 59	·1349					
16. 42	30. 0							
16. 51	31. 50							
17. 4	33. 5							
17. 12	32. 50							
17. 39	27. 30							
17. 45	26. 50							
17. 55	26. 35							
18. 9	24. 40							
18. 20	25. 10							
18. 39	24. 10							
18. 42	23. 20							
18. 51	24. 5							
19. 9	22. 45							
19. 26	21. 55							
20. 6	21. 50							
20. 24	23. 5							
20. 38	23. 0							
20. 47	24. 0							
20. 57	24. 5							
21. 8	25. 0							
21. 21	23. 55							
21. 47	27. 25							
22. 12	26. 55							
22. 36	28. 30							
22. 43	28. 30							
23. 26	32. 55							
23. 40	33. 10							
23. 47	34. 5							
23. 59	33. 55							
June 16		June 16		June 16		June 16		
0. 0	20. 33. 55	0. 0	·1349	0. 0	·03315	1. 0	61 ·9	62 ·8
0. 16	34. 30	0. 15	·1364	0. 46	·03337	3. 0	62 ·0	62 ·9
0. 21	33. 30	0. 24	·1361	5. 3	·03406	9. 0	59 ·0	60 ·2
0. 39	34. 10		***	5. 19	·03397	22. 0	57 ·3	57 ·1
0. 54	33. 55	1. 26	·1382	5. 28	·03407			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 16		June 16		June 16				
h m	° ′ ″	h m		h m		h m	°	°
1. 26	20. 35. 25	1. 45	·1383	6. 50	·03413			
1. 41	34. 35	2. 0	·1391	7. 12	·03400			
1. 48	35. 55	2. 22	·1386	7. 23	·03406			
2. 16	34. 50	2. 36	·1395	7. 53	·03400			
2. 25	35. 45	3. 10	·1383	8. 59	·03403			
2. 38	35. 20	3. 21	·1389	10. 10	·03340			
3. 8	35. 30	3. 45	·1388	12. 3	·03268			
3. 26	35. 5	3. 55	·1391	12. 12	·03275			
3. 43	35. 10	4. 28	·1383	12. 38	·03246			
4. 31	33. 40	4. 57	·1381	13. 22	·03244			
4. 41	33. 40	5. 20	·1367	17. 50	·03145			
4. 51	33. 5	5. 41	·1377	18. 57	·03136			
5. 4	33. 35	6. 11	·1373	22. 31	·03074			
5. 14	32. 55	6. 15	·1378	23. 59	·03093			
5. 24	33. 5	6. 22	·1377					
5. 38	31. 20	6. 45	·1389					
5. 54	30. 25	7. 12	·1381					
6. 9	30. 25	7. 33	·1391					
6. 32	29. 30	7. 55	·1383					
6. 56	30. 5	8. 11	·1386					
7. 13	29. 40	8. 50	·1383					
7. 41	29. 40	9. 11	·1376					
7. 53	28. 40	9. 45	·1385					
8. 2	28. 40	10. 14	·1376					
8. 25	26. 40	10. 41	·1380					
8. 39	26. 20	10. 56	·1378					
8. 44	26. 40	12. 7	·1384					
9. 1	25. 0	12. 20	·1397					
9. 10	22. 0	12. 41	·1388					
9. 26	21. 5	13. 8	·1384					
9. 51	25. 30		***					
10. 6	24. 25	13. 54	·1389					
10. 36	26. 5	17. 13	·1384					
10. 52	26. 20	17. 42	·1386					
11. 7	27. 25	17. 56	·1383					
11. 18	27. 25	18. 11	·1385					
11. 29	26. 55		***					
12. 14	27. 50	20. 23	·1375					
12. 32	31. 15	20. 44	·1376					
12. 42	29. 15	21. 25	·1370					
13. 16	29. 5	21. 45	·1372					
13. 32	30. 0	22. 0	·1369					
14. 6	27. 40	23. 11	·1372					
14. 51	27. 50	23. 59	·1376					
15. 3	27. 0							
15. 16	27. 35							
	***							
16. 0	26. 40							
16. 13	26. 40							
16. 56	25. 30							
17. 13	24. 10							
17. 26	24. 10							
17. 33	25. 30							
17. 40	25. 5							
17. 49	23. 20							
18. 4	25. 10							
18. 11	23. 40							
18. 21	25. 20							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol **:** attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 16								
h m	° ′ ″	h m		h m		h m	°	°
18. 24	20. 23. 40							
18. 28	24. 35							
18. 39	23. 20							
19. 3	23. 45							
19. 8	23. 10							
19. 26	23. 40							
19. 28	22. 55							
19. 48	23. 40							
20. 29	23. 55							
20. 56	24. 40							
21. 11	24. 10							
21. 23	25. 0							
21. 58	25. 55							
22. 26	26. 0							
23. 6	28. 10							
23. 10	28. 40							
23. 14	28. 15							
23. 24	29. 55							
23. 59	31. 30							
June 17		June 17		June 17		June 17		
0. 0	20. 31. 30	0. 0	·1376	0. 0	·03093	1. 0	58·4	58·4
0. 58	33. 25	1. 6	·1374	2. 43	·03142	9. 15	58·8	59·2
1. 4	32. 55	1. 41	·1386	3. 10	·03163	21. 0	58·9	59·7
2. 6	35. 25	2. 4	·1378	4. 34	·03198			
2. 24	35. 25	2. 13	·1379	9. 8	·03223			
2. 43	34. 10	2. 25	·1386	9. 57	·03178			
3. 42	36. 50	2. 38	·1385	10. 58	·03180			
4. 10	34. 20	3. 12	·1407	11. 55	·03136			
4. 34	33. 50	3. 43	·1398	13. 9	·03127			
4. 51	34. 5	4. 15	·1380	13. 44	·03085			
5. 25	32. 55	4. 59	·1397	14. 14	·03082			
5. 43	32. 40	5. 20	·1396	16. 11	·03103			
5. 56	32. 0	5. 41	·1404	16. 41	·03094			
6. 4	32. 10	5. 56	·1398	17. 50	·03087			
6. 20	31. 0	6. 11	·1401	19. 42	·03143			
6. 42	31. 0	6. 15	·1396	23. 59	·03147			
7. 6	29. 55	6. 43	·1406					
7. 15	30. 5	7. 41	·1399					
7. 43	29. 30	7. 55	·1402					
8. 39	29. 20	8. 39	·1399					
9. 12	29. 40	8. 43	·1403					
9. 47	28. 20	9. 13	·1400					
9. 56	25. 55	9. 40	·1396					
10. 19	24. 0	9. 53	·1399					
10. 28	22. 30	10. 29	·1390					
11. 9	27. 30	10. 45	·1393					
11. 32	25. 20	11. 6	·1389					
11. 51	25. 30	11. 11	·1393					
12. 11	22. 45	11. 45	·1404					
12. 29	26. 0	12. 13	·1392					
12. 33	25. 40	12. 22	·1399					
12. 40	24. 20	12. 35	·1397					
12. 53	24. 30	12. 45	·1387					
13. 0	26. 25	13. 25	·1386					
13. 9	28. 20	13. 38	·1393					
13. 19	32. 40	13. 55	·1399					
13. 33	34. 0	14. 36	·1400					
			***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
June 17		June 17						
h m	° ′ ″	h m		h m		h m	°	°
13. 50	20. 28. 0	15. 27	·1394					
14. 21	24. 35	16. 12	·1395					
14. 40	24. 30	16. 40	·1402					
14. 56	25. 25	17. 12	·1383					
15. 8	27. 20	17. 41	·1388					
15. 13	27. 10	17. 59	·1382					
15. 23	26. 20	18. 55	·1382					
15. 39	25. 30		***					
16. 6	28. 0	22. 12	·1367					
16. 15	29. 40	23. 14	·1371					
16. 40	27. 35	23. 25	·1368					
16. 50	30. 25	23. 40	·1371					
	***	23. 59	·1371					
17. 29	31. 55							
17. 41	30. 30							
18. 19	25. 55							
18. 55	23. 55							
19. 4	22. 20							
19. 16	22. 50							
	***							
19. 38	21. 55							
19. 44	22. 50							
19. 52	21. 30							
19. 56	23. 0							
20. 3	22. 0							
20. 8	22. 50							
	***							
20. 56	23. 20							
21. 29	24. 25							
21. 58	26. 10							
22. 7	25. 55							
23. 26	30. 30							
23. 37	30. 20							
23. 59	31. 20							
June 18		June 18		June 18		June 18		
0. 0	20. 31. 20	0. 0	·1371	0. 0	·03147	1. 0	58·9	60·0
	***	0. 12	·1374	2. 57	·03188	3. 0	59·4	61·0
1. 39	34. 20	1. 20	·1380	4. 59	·03226	9. 0	60·0	62·2
1. 42	35. 0	1. 44	·1395	6. 30	·03257	21. 0	59·3	60·2
2. 7	34. 10	1. 57	·1384	8. 43	·03260			
	***	2. 24	·1378	14. 55	·03173			
2. 52	34. 20	2. 59	·1397	15. 36	·03140			
2. 58	35. 0	3. 14	·1388	16. 26	·03157			
3. 9	34. 30	3. 33	·1395	17. 3	·03141			
3. 13	35. 0	3. 44	·1405	17. 15	·03156			
3. 20	34. 30	4. 10	·1393	17. 53	·03150			
3. 36	34. 25	4. 24	·1394	19. 56	·03197			
3. 42	35. 25	4. 41	·1406	23. 59	·03217			
4. 3	33. 55	4. 55	·1413					
4. 12	34. 0	5. 6	·1410					
4. 28	33. 30	5. 13	·1400					
4. 41	34. 0	5. 27	·1393					
4. 54	33. 30	5. 41	·1397					
5. 30	31. 15	5. 50	·1394					
5. 40	31. 15	6. 14	·1397					
6. 12	30. 15	6. 29	·1404					
6. 39	30. 15	6. 42	·1398					
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 18		June 18						
h m	° ′ ″	h m		h m		h m	°	°
7. 4	20. 30. 0	6. 55	·1395					
7. 14	29. 20	7. 9	·1399					
7. 26	29. 40	7. 14	·1395					
8. 14	28. 10	7. 41	·1398					
8. 40	21. 45	8. 22	·1394					
9. 4	25. 30	8. 50	·1416					
9. 29	24. 45	9. 34	·1394					
9. 41	25. 10	9. 47	·1396					
9. 48	24. 45	10. 49	·1390					
9. 55	25. 35	13. 12	·1400					
10. 14	24. 45	14. 56	·1392					
10. 30	25. 40	15. 35	·1401					
11. 24	25. 30	16. 14	·1393					
11. 40	26. 30	16. 42	·1404					
11. 45	25. 40	17. 26	·1390					
12. 38	27. 40	18. 15	·1384					
12. 49	29. 5	18. 54	·1384					
13. 4	29. 5		***					
13. 21	27. 40	19. 41	·1368					
	***	19. 55	·1373					
14. 23	26. 30	20. 12	·1379					
14. 44	32. 0	20. 38	·1375					
15. 0	34. 5	21. 6	·1378					
15. 11	34. 0	22. 11	·1368					
15. 32:	27. 50	22. 35	·1370					
15. 55	25. 40	22. 47	·1364					
16. 25	25. 25	23. 6	·1366					
16. 34	26. 10	23. 13	·1370					
16. 56	25. 5	23. 43	·1366					
16. 59	25. 30	23. 59	·1369					
17. 9	24. 20							
17. 22	26. 5							
17. 33	26. 15							
17. 56	25. 0							
18. 15	25. 10							
18. 32	26. 0							
18. 40	26. 40							
19. 3	26. 0							
19. 16	26. 10							
19. 36	24. 25							
	***							
20. 4	26. 40							
20. 33	24. 25							
20. 53	23. 45							
21. 24	25. 5							
22. 4	24. 35							
23. 43	29. 50							
23. 59	29. 55							
June 19		June 19		June 19		June 19		
0. 0	20. 29. 55	0. 0	·1369	0. 0	·03217	1. 0	60·1	61·5
0. 12	29. 55	0. 18	·1371	1. 10	·03224	3. 0	60·7	63·0
	***	0. 41	·1374	5. 19	·03323	9. 0	60·8	63·0
0. 53	32. 5	0. 54	·1375	8. 6	·03352	21. 0	60·3	61·0
1. 15	32. 5	1. 12	·1376	18. 12	·03316	22. 0	60·5	61·1
2. 38	33. 45	1. 26	·1378	23. 59	·03296	23. 0	60·5	61·0
3. 8	32. 10	1. 56	·1380					
3. 39	32. 20	2. 11	·1383					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 19		June 19						
h m	° ′ ″	h m		h m		h m	°	°
4. 26	20. 31. 25	2. 30	·1387					
4. 42	31. 40	2. 36	·1386					
4. 55	31. 25	2. 43	·1384					
5. 4	32. 20	3. 10	·1392					
5. 26	30. 10	3. 57	·1397					
5. 36	30. 10	4. 23	·1394					
5. 41	30. 30	4. 47	·1397					
5. 48	29. 55	5. 6	·1406					
6. 2	30. 45	5. 20	·1392					
6. 30	30. 30	5. 34	·1388					
6. 40	31. 5	5. 43	·1391					
6. 49	30. 20	5. 52	·1388					
6. 56	30. 55	6. 6	·1393					
7. 22	27. 50	6. 11	·1390					
7. 28	27. 40	6. 27	·1395					
7. 53	28. 35	6. 41	·1400					
7. 57	27. 55	6. 47	·1393					
8. 8	28. 35	6. 55	·1397					
8. 24	27. 10	7. 20	·1392					
8. 47	29. 30	7. 42	·1396					
8. 57	28. 50	7. 56	·1385					
9. 8	29. 10	8. 2	·1388					
9. 25	28. 50	8. 12	·1387					
10. 10	29. 35	8. 27	·1394					
11. 26	29. 30	8. 55	·1386					
11. 49	28. 40	9. 43	·1383					
12. 7	28. 55	10. 10	·1386					
12. 44	28. 50	12. 45	·1383					
12. 56	29. 20	13. 11	·1387					
13. 56	27. 25	14. 42	·1386					
14. 12	29. 20	14. 56	·1381					
14. 26	29. 20	15. 47	·1382					
14. 33	28. 35		***					
15. 14	28. 35	16. 44	·1389					
15. 37	29. 40	17. 12	·1385					
15. 51	28. 45	19. 42	·1381					
16. 11	29. 5	21. 12	·1371					
16. 57	25. 55	22. 43	·1374					
18. 5	23. 35	23. 59	·1371					
18. 21	23. 45							
18. 31	23. 10							
18. 53	24. 10							
19. 8	23. 30							
20. 26	24. 35							
20. 54	26. 0							
21. 33	27. 0							
21. 57	27. 0							
22. 29	28. 20							
23. 21	30. 25							
23. 40	31. 50							
23. 59	32. 5							
June 20		June 20		June 20		June 20		
0. 0	20. 32. 5	0. 0	·1371	0. 0	·03296	0. 0	60·9	61·8
0. 39	32. 20	0. 12	·1374	5. 54	·03380	1. 0	60·9	62·0
0. 53	33. 0	0. 34	·1377	6. 24	·03400	3. 0	61·3	62·4
1. 8	32. 20	1. 1	·1376	9. 9	·03384	9. 0	61·0	62·0
1. 24	33. 15	1. 10	·1372	12. 28	·03323	21. 0	61·4	62·6

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 20		June 20		June 20		June 20		
h m	° ′ ″	h m		h m		h m		°
1. 44	20. 33. 25	2. 28	·1380	14. 26	·03307	22. 0	61·5	62·8
2. 30	32. 10	2. 56	·1387	16. 9	·03318	23. 0	61·6	63·0
3. 26	32. 25	3. 18	·1383	18. 0	·03315			
4. 13	31. 10	3. 36	·1387	19. 57	·03327			
4. 25	31. 50	3. 57	·1383	23. 59	·03342			
5. 33	29. 30	4. 20	·1386					
5. 41	28. 25	4. 35	·1400					
5. 50	28. 35	4. 56	·1404					
6. 14	25. 10	5. 12	·1399					
6. 38	26. 55	5. 35	·1395					
6. 41	26. 35	5. 41	·1399					
7. 44	29. 25	5. 56	·1393					
9. 19	29. 0	6. 10	·1388					
9. 59	29. 25	6. 25	·1397					
13. 47	27. 35	6. 44	·1391					
14. 6	28. 0	6. 55	·1394					
14. 42	27. 10	7. 25	·1389					
15. 9	27. 30	7. 53	·1391					
15. 39	25. 40	8. 12	·1386					
15. 54	25. 20	8. 25	·1389					
16. 8	26. 30	8. 42	·1384					
16. 17	25. 50	9. 57	·1387					
16. 26	26. 30	10. 56	·1383					
16. 58	23. 45	11. 22	·1386					
17. 7	24. 35	12. 10	·1383					
17. 25	23. 55	15. 22	·1389					
17. 40	23. 55	16. 56	·1388					
17. 51	25. 20	18. 11	·1381					
17. 54	23. 40	18. 43	·1381					
18. 10	24. 35		***					
19. 5	24. 20	19. 56	·1371					
19. 22	24. 0	20. 19	·1373					
19. 47	24. 50	20. 40	·1367					
19. 54	23. 15	21. 10	·1369					
20. 8	25. 25	21. 41	·1371					
20. 21	26. 20	22. 8	·1370					
20. 27	25. 40	22. 36	·1373					
21. 47	26. 55	23. 59	·1370					
22. 37	28. 15							
23. 9	30. 0							
23. 45	30. 55							
23. 59	30. 55							
June 21		June 21		June 21		June 21		
0. 0	20. 30. 55	0. 0	·1370	0. 0	·03342	0. 0	62·1	63·8
1. 9	32. 15	0. 20	·1372	3. 42	·03436	1. 0	62·7	64·1
2. 23	31. 5	1. 35	·1377	5. 41	·03441	2. 0	62·8	65·2
3. 39	30. 25	3. 27	·1386	10. 14	·03468	3. 0	62·8	64·8
5. 26:	28. 45	5. 26	·1386	14. 8	·03463	9. 0	64·1	65·9
6. 49	29. 40	6. 43	·1388	17. 43	·03415	11. 30	62·8	64·2
10. 17	29. 10	8. 8	·1389	20. 30	·03428	21. 0	62·8	64·7
11. 25	28. 50	9. 11	·1384	22. 44	·03416			
11. 56	28. 25	9. 26	·1389	23. 59	·03436			
12. 59	28. 55	10. 0	·1387					
13. 24	28. 35		***					
13. 30	27. 55	12. 11	·1392					
13. 54	28. 25	13. 50	·1394					
14. 10	27. 5	14. 21	·1390					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June 21		June 21						
h m	° ′ ″	h m		h m				
14. 32	20. 30. 10	15. 12	·1394					
14. 39	30. 20	16. 19	·1392					
15. 10	27. 5	17. 12	·1393					
15. 41	24. 30	18. 57	·1384					
16. 53	23. 50	20. 12	·1377					
17. 14	23. 10	21. 57	·1377					
18. 29	23. 30	23. 3	·1380					
18. 35	23. 10	23. 10	·1378					
18. 56	24. 10		***					
19. 6	23. 40	23. 59	·1386					
20. 7	23. 40							
20. 59	25. 10							
21. 6	24. 5							
22. 41	28. 55							
22. 49	28. 55							
23. 5	30. 25							
23. 30	30. 40							
23. 49	30. 55							
23. 59	31. 30							
June 22		June 22		June 22		June 22		
0. 0	20. 31. 30	0. 0	·1386	0. 0	·03436	1. 0	63·8	66·0
0. 9	32. 20	0. 12	·1382	0. 25	·03442	3. 0	64·2	66·2
0. 17	31. 50	0. 26	·1393	0. 43	·03444	9. 0	63·9	66·2
0. 22	32. 30	0. 41	·1395	0. 56	·03437	21. 0	61·6	62·9
0. 35	32. 50	0. 52	·1405	1. 52	·03464			
0. 53	34. 10	1. 11	·1372	4. 23	·03496			
1. 6	31. 45	1. 27	·1382	6. 38	·03527			
1. 29	33. 20	1. 41	·1375	9. 41	·03526			
1. 41	32. 20		***	11. 57	·03424			
	***	2. 12	·1394	14. 34	·03377			
2. 11	32. 40	2. 25	·1393	17. 41	·03280			
2. 21	31. 35	2. 35	·1388	20. 24	·03334			
2. 27	31. 40	2. 45	·1402	23. 59	·03344			
2. 36	30. 55	2. 52	·1399					
2. 39	31. 50	3. 12	·1404					
2. 48	31. 40	3. 38	·1393					
	***	4. 7	·1387					
3. 6	32. 20	5. 12	·1393					
3. 33	31. 20	5. 33	·1398					
4. 53	30. 40	5. 44	·1393					
5. 26	31. 0	5. 58	·1397					
6. 13:	28. 35	6. 38	·1396					
6. 51	28. 50	7. 10	·1389					
7. 8	26. 20	7. 41	·1387					
7. 23	26. 10	8. 4	·1390					
7. 56	28. 10	8. 42	·1383					
8. 4	28. 0	8. 57	·1385					
8. 26	29. 20	9. 23	·1380					
8. 43	28. 40	9. 54	·1384					
10. 12	29. 50	10. 25	·1382					
11. 3	28. 35	10. 44	·1387					
11. 40	25. 10	11. 43	·1386					
11. 59	24. 5	12. 24	·1377					
13. 10	25. 0	12. 55	·1383					
13. 34	26. 10	13. 19	·1381					
13. 43	25. 45	14. 0	·1381					
13. 53	26. 40	15. 4	·1389					
			***					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
June 22	
h m	° ′ ″
13. 58	20. 25. 55
14. 43	28. 0
14. 58	27. 40
15. 10	26. 30
15. 58	25. 0
16. 6	25. 20
16. 31	23. 40
17. 8	22. 55
17. 20	23. 30
18. 21	23. 20
18. 40	23. 55
19. 3	23. 40
19. 13	24. 20
19. 32	23. 50
19. 51	24. 30
20. 6	24. 30
20. 23	25. 45
20. 32	25. 35
21. 11	26. 30
21. 56	29. 30
22. 53	30. 50
23. 21	30. 50
23. 29	31. 25
23. 48	31. 30
23. 59	32. 5
June 23	
0. 0	20. 32. 5
0. 43	32. 40
1. 8	33. 10
1. 50	34. 0
2. 56	33. 0
3. 42	31. 50
4. 40	31. 50
5. 8	31. 5
7. 15	30. 10
7. 29	27. 25
8. 3	30. 20
8. 40	29. 0
8. 54	27. 30
9. 41	27. 30
9. 55	28. 25
10. 26	27. 55
10. 55	28. 30
11. 8	27. 50
11. 22	28. 20
11. 54	27. 25
12. 39	28. 10
13. 15	24. 25
13. 23	25. 0
13. 35	24. 10
13. 39	22. 40
13. 49	23. 5
14. 9	21. 30
14. 29	21. 0
14. 50	21. 30
	***
15. 11	23. 45

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
June 22	
h m	
16. 45	·1391
17. 30	·1384
17. 42	·1395
18. 12	·1390
19. 35	·1382
19. 44	·1384
20. 12	·1379
20. 50	·1382
21. 19	·1379
21. 30	·1382
21. 56	·1380
23. 59	·1391
June 23	
0. 0	·1391
0. 13	·1388
1. 14	·1392
1. 57	·1400
2. 12	·1395
2. 29	·1400
2. 43	·1397
3. 6	·1399
3. 30	·1395
3. 56	·1400
4. 25	·1396
4. 51	·1398
5. 36	·1395
5. 47	·1393
6. 6	·1395
6. 27	·1400
6. 42	·1396
7. 4	·1402
7. 22	·1400
7. 43	·1406
8. 5	·1403
8. 12	·1406
8. 45	·1397
9. 10	·1398
9. 34	·1393
9. 54	·1399
10. 41	·1400
11. 12	·1399
11. 25	·1401
11. 57	·1397
12. 24	·1397

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
June 23	
0. 0	·03344
4. 19	·03435
9. 26	·03478
11. 7	·03414
14. 12	·03343
15. 13	·03357
16. 53	·03354
17. 40	·03338
20. 56	·03367
23. 59	·03389

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
June 23		
1. 0	62 ·9	64 ·0
3. 0	63 ·7	65 ·8
9. 0	63 ·8	66 ·0
22. 0	62 ·4	64 ·2

Greenwich Mean Solar Time.	Western Declination.
June 23	
h m	° ′ ″
15. 36	20. 23. 45
15. 52	24. 30
16. 8	24. 10
16. 27:	24. 45
17. 5	23. 20
17. 26	23. 30
17. 36	24. 25
17. 41	23. 55
18. 10	24. 30
18. 56	24. 20
19. 36	24. 30
20. 14	24. 30
21. 39	27. 50
23. 14	30. 25
23. 26	31. 35
23. 33	31. 20
23. 59	32. 25
June 24	
0. 0	20. 32. 25
0. 19	32. 25
1. 36	34. 20
1. 47	33. 50
2. 4	33. 15
2. 8	34. 15
2. 22	32. 50
4. 12	30. 30
4. 27	30. 55
6. 7	29. 55
7. 5	29. 55
8. 3	29. 20
8. 57	28. 55
10. 6	28. 25
10. 13	27. 45
10. 26	28. 0
10. 41	25. 25
10. 54	24. 10
11. 8	23. 50
11. 39	25. 30
12. 26	24. 40
12. 39	25. 10
12. 43	24. 55
13. 6	26. 0
13. 45	25. 55
14. 26	25. 45
14. 39	24. 35
14. 53	25. 20
15. 6	24. 25
15. 28	25. 35
16. 41	23. 55
17. 19	23. 30
17. 37	23. 30
17. 41	24. 10
17. 53	23. 30
18. 24	24. 40
18. 29	23. 30
18. 40	24. 25
18. 49	24. 5

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
June 23	
12. 42	·1403
12. 57	·1401
13. 25	·1404
14. 0	·1398
14. 57	·1388
15. 44	·1391
16. 27	·1393
17. 36	·1385
19. 11	·1382
19. 55	·1382
21. 42	·1376
22. 12	·1378
22. 29	·1376
23. 12	·1380
23. 25	·1388
23. 41	·1383
23. 59	·1384
June 24	
0. 0	·1384
0. 56	·1386
1. 15	·1385
1. 41	·1390
2. 5	·1391
2. 12	·1397
2. 29	·1389
3. 20	·1393
3. 49	·1388
5. 55	·1394
6. 21	·1390
8. 35	·1395
8. 43	·1387
	***
10. 23	·1396
10. 42	·1392
12. 13	·1396
12. 52	·1392
13. 24	·1394
14. 46	·1396
15. 3	·1393
16. 35	·1398
19. 13	·1396
21. 20	·1380
22. 36	·1376
22. 54	·1378
23. 10	·1375
23. 25	·1378
23. 59	·1380

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
June 24	
0. 0	·03389
2. 14	·03433
5. 56	·03457
8. 55	·03484
10. 38	·03414
12. 23	·03356
15. 40	·03268
17. 34	·03218
19. 52	·03244
23. 59	·03282

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	
June 24		
1. 0	63 ·1	65 ·4
8. 30	64 ·0	65 ·6
21. 0	60 ·7	62 ·9

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁏ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Reading of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June24								
h m	° ′ ″	h m		h m		h m	°	°
20. 10	20. 24. 40							
20. 19	24. 25							
20. 34	24. 25							
21. 23	27. 20							
21. 39	27. 55							
21. 54	28. 50							
22. 2	28. 30							
23. 0	32. 10							
23. 11	32. 10							
23. 37	33. 55							
23. 59	34. 35							
June25		June25		June25		June25		
0. 0	20. 34. 35	0. 0	·1380	0. 0	·03282	1. 0	61·[illegible]	63·4
0. 4	34. 45	0. 41	·1388	0. 30	·03297	3. 0	62·7	63·7
0. 14	33. 50	1. 50	·1395	3. 53	·03363	9. 0	62·9	65·0
0. 22	34. 10	2. 25	·1392		(†)	21. 0	62·1	63·6
0. 39	33. 20	4. 11	·1395	9. 0	·03406*			
0. 59	32. 20	4. 20	·1391	21. 0	·03353*			
1. 26	32. 10	4. 48	·1395	22. 3	·03353			
1. 41	32. 45	4. 57	·1392	22. 58	·03346			
2. 56	31. 40		***	23. 59	·03363			
4. 3	31. 25	7. 11	·1404					
5. 7	30. 30	7. 22	·1400					
7. 0	30. 20	7. 50	·1397					
7. 30	29. 35	9. 42	·1397					
9. 23	29. 20	11. 42	·1397					
9. 33	28. 35		***					
9. 45	28. 50	13. 12	·1392					
10. 9	27. 30	14. 26	·1396					
11. 9	28. 40	15. 26	·1391					
11. 34	28. 0	16. 35	·1393					
12. 7	26. 55	17. 49	·1386					
12. 36	27. 20	19. 11	·1386					
13. 25	26. 40	21. 44	·1377					
14. 11	28. 0	22. 54	·1378					
15. 7	26. 55	22. 57	·1375					
15. 39	25. 40	23. 19	·1380					
16. 19	25. 40	23. 59	·1384					
17. 22	23. 5							
17. 33	23. 40							
17. 39	23. 25							
18. 12	24. 35							
18. 19	24. 20							
18. 28	25. 10							
18. 33	24. 35							
18. 54	25. 5							
19. 3	24. 40							
19. 16	25. 45							
19. 26	25. 20							
20. 19	25. 35							
20. 38	21. 15							
20. 42	21. 15							
22. 12	30. 55							
22. 26	32. 10							
22. 41	32. 20							
22. 55	33. 15							
23. 4	32. 10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June25								
h m	° ′ ″	h m		h m		h m	°	°
23. 21	20. 33. 0							
23. 51	32. 40							
23. 59	33. 5							
June26		June26		June26		June26		
0. 0	20. 33. 5	0. 0	·1384	0. 0	·03363	1. 0	63·0	63·6
0. 11	34. 10	0. 41	·1384	1. 11	·03385	3. 0	64·5	65·7
1. 9	35. 0	0. 57	·1384	4. 10	·03403	9. 0	64·1	66·0
1. 30	35. 5	1. 7	·1387	9. 34	·03503	19. 0	63·5	64·0
2. 26	33. 50	1. 57	·1391	13. 12	·03433	21. 0	63·3	65·7
3. 1	33. 5	2. 14	·1396	17. 45	·03407	22. 0	63·1	64·5
3. 22	32. 20	2. 45	·1392	19. 56	·03444	23. 0	63·6	66·0
6. 56	29. 5	3. 6	·1395	22. 43	·03415			
7. 40	28. 35	3. 25	·1393	23. 59	·03440			
7. 49	29. 0		***					
8. 14	26. 45	4. 51	·1394					
8. 36	28. 10	5. 6	·1399					
9. 6	29. 0	5. 22	·1393					
10. 14	29. 0	5. 59	·1397					
11. 6	28. 20	6. 55	·1397					
11. 33	27. 25	7. 19	·1395					
11. 45	28. 0	7. 33	·1397					
11. 57	27. 20	8. 8	·1392					
12. 39	28. 20	8. 22	·1398					
12. 59	28. 10	8. 33	·1394					
13. 22	27. 0	8. 49	·1397					
13. 56	27. 20	12. 6	·1392					
14. 10	28. 5	12. 14	·1389					
15. 9	27. 35	12. 34	·1393					
15. 14	26. 40	13. 26	·1389					
15. 21	26. 55	14. 5	·1388					
	***	14. 20	·1392					
16. 6	25. 35	17. 13	·1391					
17. 13	22. 55	18. 20	·1383					
17. 50	22. 10	19. 12	·1380					
18. 6	22. 20	19. 42	·1383					
18. 10	23. 50	20. 26	·1380					
18. 15	21. 20	21. 13	·1382					
18. 23	24. 40	21. 55	·1381					
18. 51	23. 40	22. 17	·1383					
19. 11	24. 20	22. 55	·1376					
	***	23. 42	·1383					
19. 41	25. 50	23. 59	·1383					
20. 59	25. 20							
21. 9	25. 50							
21. 21	26. 0							
21. 45	27. 40							
22. 12	28. 30							
22. 29	29. 20							
22. 56	30. 5							
23. 14	32. 0							
23. 41	33. 25							
23. 59	32. 40							
June27		June27		June27		June27		
0. 0	20. 32. 45	0. 0	·1383	0. 0	·03440	0. 0	[illegible]	[illegible]
0. 22	33. 20	0. 27	·1388	0. 11	[illegible]	1. 0	64·6	67·0
2. 54	32. 40	1. 52	·1393	11. 48	·03577	2. 0	64·[illegible]	67·[illegible]

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

June 25. The Vertical Force time-piece was not going from 3ʰ. 53ᵐ. to 22ʰ. 3ᵐ.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June27		June27		June27		June27		
h. m.	° ′ ″	h. m.		h. m.		h. m.	°	°
3. 11	20. 33. 10	2. 0	·1386	12. 24	·03546	3. 0	64·6	67·1
5. 6	31. 10	2. 12	·1394	23. 59	·03523	9. 0	65·4	67·1
5. 41	31. 20	2. 26	·1380			21. 0	64·8	67·8
7. 11	29. 50	4. 18	·1387			22. 0	65·0	67·2
7. 39	30. 5	4. 41	·1390			23. 0	65·0	67·3
8. 43	28. 5	5. 9	·1387					
8. 59	28. 30	5. 58	·1391					
9. 26	27. 25	6. 12	·1388					
9. 38	28. 0	6. 43	·1392					
10. 26	25. 0	6. 56	·1390					
11. 8	24. 45	7. 12	·1394					
11. 39	25. 50	7. 20	·1392					
11. 56	27. 45	7. 27	·1385					
12. 23	25. 0	7. 52	·1391					
12. 55	24. 0	8. 2	·1394					
13. 8	24. 30	8. 15	·1392					
13. 22	24. 10	8. 41	·1392					
14. 13	26. 30	8. 45	·1388					
15. 20	26. 40	9. 0	·1394					
16. 0	25. 45	9. 12	·1392					
16. 9	26. 20	9. 24	·1387					
16. 42	25. 10	10. 12	·1392					
17. 6	25. 0	10. 31	·1384					
17. 17	24. 25	10. 58	·1376					
19. 11	23. 5	11. 43	·1387					
19. 23	22. 40	12. 12	·1406					
19. 54	23. 40	13. 46	·1386					
20. 36	23. 30	17. 5	·1388					
22. 9	26. 0	19. 50	·1383					
23. 23	30. 55	21. 41	·1367					
23. 28	30. 30	21. 55	·1372					
23. 59	32. 15	22. 50	·1355					
		23. 12	·1364					
		23. 30	·1366					
		23. 59	·1373					
June28		June28		June28		June28		
0. 0	20. 32. 15	0. 0	·1373	0. 0	·03523	0. 0	65·1	67·4
1. 26	34. 10	0. 40	·1375	1. 26	·03532	1. 0	65·3	67·0
1. 56	35. 40	1. 16	·1383	1. 57	·03546	3. 0	65·3	67·0
3. 22	33. 55	1. 27	·1380	3. 38	·03554	9. 0	65·7	67·6
3. 41	33. 5	2. 5	·1392	4. 57	·03577	21. 0	64·1	65·0
4. 15	32. 35	2. 16	·1384	9. 26	·03602			
6. 26	28. 50	2. 42	·1385	11. 57	·03556			
8. 53	27. 30	3. 25	·1390	13. 41	·03537			
9. 29	28. 0	4. 12	·1390	17. 15	·03502			
10. 45	28. 0	4. 50	·1388	21. 34	·03464			
11. 29	26. 55	6. 12	·1394	23. 59	·03492			
11. 51	27. 40	6. 39	·1392					
12. 9	27. 10	7. 26	·1396					
12. 22	27. 50	7. 50	·1394					
12. 39	26. 30		***					
13. 8	29. 10	9. 26	·1389					
13. 23	29. 10		***					
13. 51	26. 25	13. 26	·1385					
14. 7	27. 0		***					
14. 44	26. 50	14. 0	·1383					
16. 30	25. 10		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
June28		June28						
h. m.	° ′ ″	h. m.		h. m.		h. m.	°	°
16. 42	20. 25. 20	17. 12	·1391					
17. 45	23. 0	19. 3	·1384					
18. 26	23. 0	20. 25	·1376					
	***	20. 53	·1376					
19. 8	22. 10	21. 11	·1372					
	***		***					
19. 54	22. 10	22. 10	·1379					
20. 12	23. 30	22. 32	·1370					
20. 29	22. 25	22. 53	·1367					
	***	23. 12	·1372					
21. 3	25. 5	23. 34	·1368					
21. 32	25. 30	23. 52	·1366					
22. 12	28. 10	23. 59	·1369					
22. 24	30. 10							
22. 39	30. 10							
22. 44	31. 10							
22. 53	30. 40							
23. 13	32. 55							
23. 28	32. 50							
23. 59	35. 5							
June29		June29		June29		June29		
0. 0	20. 35. 5	0. 0	·1380	0. 0	·03490	1. 0	64·9	66·0
0. 25	35. 5	0. 40	·1378	1. 0	·03500*	3. 0	64·8	67·0
0. 40	36. 30	0. 48	·1382	3. 0	·03537*	9. 0	66·0	67·0
1. 28	35. 10	1. 11	·1376		(†)	21. 0	64·1	66·2
2. 13	35. 20	1. 41	·1382	4. 16	·03560			
2. 47	34. 30	2. 45	·1392	7. 2	·03589			
3. 17	35. 55	3. 12	·1405	8. 52	·03585			
3. 26	35. 40	3. 20	·1412		(†)			
3. 39	34. 25	3. 43	·1389	9. 0	·03584*			
4. 3	33. 40	3. 55	·1384	11. 24	·03563			
4. 26	33. 40	4. 15	·1391	14. 34	·03496			
4. 47	32. 0	4. 42	·1403	16. 50	·03472			
5. 23	30. 55	4. 56	·1392	23. 11	·03464			
5. 47	29. 30	5. 38	·1403	23. 59	·03477			
6. 12	28. 20	5. 52	·1398					
6. 41	27. 40	6. 14	·1397					
7. 6	27. 40	6. 26	·1399					
7. 26	28. 20	6. 55	·1394					
8. 14	26. 55	7. 13	·1399					
8. 47	27. 30	7. 40	·1397					
8. 56	26. 55	7. 50	·1399					
9. 13	27. 15	8. 12	·1394					
9. 26	27. 0	8. 26	·1396					
9. 50	28. 5	8. 45	·1392					
10. 8	27. 10	8. 54	·1389					
	***	9. 28	·1391					
10. 44	27. 30	9. 50	·1399					
10. 54	27. 0	10. 10	·1390					
12. 24	27. 55	11. 3	·1397					
13. 57	27. 20		***					
14. 20	28. 10	12. 12	·1391					
14. 41	27. 55	12. 26	·1392					
15. 10	26. 20	13. 57	·1391					
15. 22	27. 20	14. 23	·1394					
15. 53	26. 50	15. 32	·1391					
16. 10	26. 10	16. 42	·1394					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 29		June 29						
h m	° ′ ″	h m		h m		h m	°	°
16. 41	20. 26. 15	17. 47	·1389					
17. 11	24. 15	19. 2	·1382					
17. 20	25. 0	20. 26	·1382					
	* * *	20. 42	·1380					
18. 52	23. 0	21. 39	·1376					
18. 59	23. 30	22. 43	·1371					
19. 17	23. 5	22. 56	·1378					
20. 4	23. 10	23. 11	·1376					
20. 25	24. 35	23. 27	·1373					
20. 34	24. 0	23. 59	·1376					
20. 52	24. 10							
21. 3	25. 10							
21. 10	24. 50							
22. 11	27. 55							
22. 38	27. 30							
22. 52	29. 15							
22. 56	28. 40							
23. 59	31. 0							
June 30		June 30		June 30		June 30		
0. 0	20. 31. 0	0. 0	·1376	0. 0	·03477	1. 0	65·0	66·4
1. 21	32. 20	0. 56	·1383	6. 21	·03562	3. 0	65·4	66·8
2. 0	31. 50	2. 0	·1383	9. 8	·03565	9. 0	64·2	66·3
2. 7	32. 0	2. 13	·1389	10. 56	·03522	12. 0	61·4	63·7
2. 23	31. 10	2. 26	·1386	13. 4	·03484	21. 30	61·6	63·0
3. 54	30. 0	3. 13	·1385	18. 14	·03386			
4. 44	30. 0	3. 35	·1387	19. 30	·03391			
5. 11	30. 20	3. 56	·1383	23. 0	·03337			
5. 39	30. 0	4. 24	·1386	23. 59	·03368			
7. 59	28. 55	4. 42	·1384					
8. 59	29. 0	4. 59	·1389					
9. 26	28. 20	6. 9	·1391					
10. 52	28. 30	6. 22	·1390					
11. 26	27. 10	6. 41	·1393					
12. 0	27. 40	6. 57	·1391					
13. 42	27. 55	8. 54	·1387					
14. 26	26. 25		—					
14. 51	27. 20	13. 21	·1365					
15. 6	25. 35		* * *					
15. 48	27. 55	16. 8	·1375					
16. 23	24. 50	17. 42	·1380					
16. 31	24. 50	19. 40	·1382					
16. 44	24. 20	20. 21	·1380					
17. 3	24. 35	20. 42	·1382					
17. 25	23. 30	21. [illegible]	·1378					
17. 39	24. 20	21. 43	·1379					
18. 8	23. 30	21. 56	·1377					
18. 13	23. 40	22. 45	·1381					
18. 33	23. 20	23. [illegible]	·13[illegible]					
18. 54	24. 45	23. 54	·1385					
19. 16	[illegible]	23. 59	·1388					
20. 9	25. 5							
20. 37	24. 40							
20. 49	25. 40							
20. 56	25. 20							
21. 59	26. 30							
22. 26	27. 30							
22. 36	28. 55							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
June 30								
h m	° ′ ″	h m		h m		h m	°	°
22. 56	20. 29. 30							
23. 21	32. 0							
23. 46	32. 0							
23. 55	32. 30							
23. 59	32. 35							
July 1		July 1		July 1		July 1		
0. 0	20. 32. 35	0. 0	·1388	0. 0	·03368	0. 0	62·7	63·8
0. 26	32. 55	0. 19	·1383	1. 45	·03363	9. 0	61·2	62·9
0. 55	34. 5	0. 57	·1387	4. 43	·03423	21. 0	59·7	60·8
1. 37	34. 5	1. 15	·1382	6. 12	·03428			
2. 6	33. 0	1. 56	·1385	7. 26	·03420			
4. 3	30. 0	2. 26	·1399	9. 8	·03420			
5. 44	28. 40	3. 6	·1391	11. 4	·03328			
6. 23	29. 20	3. 41	·1396	17. 54	·03140			
7. 23	28. 25	4. 22	·1394	20. 42	·03134			
8. 23	28. 50	5. 12	·1394	23. 26	·03164			
8. 58	28. 5	6. 43	·1394	23. 40	·03154			
10. 10	27. 40	7. 51	·1397	23. 59	·03160			
11. 50	27. 10		* * *					
12. 33	26. 40	10. 42	·1401					
14. 39	26. 20		* * *					
15. 27	25. 30	16. 54	·1406					
15. 53	25. 30	18. 20	·1400					
17. 9	22. 15	18. 43	·1402					
17. 21	23. 20	19. 14	·1398					
17. 24	21. 50	19. 40	·1400					
17. 31	21. 5	20. 12	·1393					
17. 44	22. 55	20. 26	·1381					
17. 56	21. 50	20. 56	·1368					
18. 10	22. 35	21. 36	·1385					
	—	21. 52	·1391					
18. 33	21. 45	21. 58	·1389					
19. 7	22. 5	23. 14	·1399					
19. 18	21. 45	23. 30	·1407					
19. 41:	22. 30	23. 49	·1399					
20. 4	22. 40	23. 59	·1396					
20. 16	21. 35							
20. 24	21. 5							
20. 29	22. 55							
20. 49	24. 0							
21. 23	30. 20							
21. 26	29. 55							
21. 35	30. 50							
21. 41	29. 55							
21. 56	30. 20							
22. 28:	28. 5							
23. 0	28. 0							
23. 26	29. 50							
23. 37	31. 40							
23. 46	30. 40							
23. 59	31. 20							
July 2		July 2		July 2		July 2		
0. 0	20. 31. 20	0. 0	·1396	0. 0	·03160	1. 0	60·8	62·0
0. 25	31. 30	0. 26	·1390	1. 25	[illegible]	3. 0	[illegible]	[illegible]
0. 55	32. 10	0. 39	·13[illegible]	3. 56	[illegible]	[illegible]	[illegible]	[illegible]
1. 3	31. 40	1. 11	·1385	[illegible]	[illegible]	21. 0	[illegible]	[illegible]
	* * *							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 2		July 2		July 2				
h m	° ′ ″	h m		h m		h m	°	°
1. 16	20. 32. 30	1. 43	·1384	6. 12	·03276			
1. 43	31. 40	1. 57	·1397	9. 22	·03278			
1. 59	32. 15	2. 10	·1393	10. 32	·03214			
2. 6	31. 55	2. 14	·1395	10. 41	·03214			
2. 18	32. 0	2. 26	·1388	11. 33	·03182			
2. 28	30. 55	2. 41	·1395	14. 42	·03155			
2. 39	31. 55	2. 55	·1394	16. 10	·03141			
3. 12	31. 20	3. 24	·1395	17. 41	·03114			
3. 24	31. 50	4. 4	·1397	21. 14	·03147			
4. 9	30. 40	4. 11	·1403	22. 54	·03138			
4. 41	31. 10	4. 17	·1399	23. 59	·03143			
5. 9	30. 25	4. 24	·1403					
6. 11	29. 40	4. 54	·1405					
6. 30	29. 40	5. 13	·1401					
6. 48	28. 15	5. 42	·1399					
8. 9	28. 30	5. 54	·1402					
8. 24	28. 0	6. 20	·1406					
8. 42	28. 40	6. 43	·1404					
9. 5	28. 10	6. 57	·1406					
9. 53	24. 0	7. 14	·1406					
10. 13	24. 55	7. 33	·1410					
10. 30	23. 10	7. 57	·1406					
11. 0	25. 35	8. 13	·1407					
11. 18	24. 30	8. 56	·1405					
11. 36	25. 10	9. 25	·1399					
11. 58	25. 10	10. 11	·1404					
12. 13	26. 0	10. 36	·1402					
12. 36	26. 0	10. 57	·1408					
12. 54	27. 15	12. 41	·1406					
13. 10	26. 40	12. 50	·1412					
13. 33	24. 25	13. 12	·1407					
14. 6	25. 55	14. 6	·1408					
14. 33	24. 40	15. 8	·1404					
14. 41	26. 5	15. 50	·1408					
14. 51	24. 25	17. 29	·1406					
15. 36	25. 30	18. 11	·1401					
15. 51	25. 0	18. 28	·1404					
16. 44	23. 10	19. 6	·1400					
16. 59	23. 55	19. 22	·1405					
17. 32	22. 55	19. 35	·1403					
17. 51	24. 10	19. 58	·1404					
17. 59	24. 10	20. 54	·1396					
18. 7	25. 25	21. 2	·1399					
18. 19	25. 25	21. 35	·1393					
18. 39	26. 20	21. 53	·1394					
18. 53	25. 30	22. 5	·1397					
18. 58	25. 40	22. 20	·1392					
19. 6	24. 0	23. 11	·1392					
19. 10	24. 10	23. 41	·1387					
19. 14	25. 10	23. 50	·1380					
	†	23. 59	·1378					
19. 36	24. 0							
19. 53	25. 5							
19. 59	24. 55							
	***							
20. 37	26. 30							
20. 43	25. 40							
	***							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 2								
h m	° ′ ″	h m		h m		h m	°	°
21. 49	20. 28. 0							
22. 41	30. 30							
23. 6	31. 20							
23. 15	32. 10							
23. 25	32. 20							
23. 39	33. 10							
23. 59	33. 30							
July 3		July 3		July 3		July 3		
0. 0	20. 33. 30	0. 0	·1378	0. 0	·03143	1. 0	60·9	61·2
0. 13	32. 10	0. 11	·1377	2. 6	·03180	3. 0	60·7	61·7
0. 26	33. 0	0. 27	·1394	4. 21	·03217	9. 0	57·3	58·4
1. 11	32. 0	0. 44	·1400	6. 22	·03224	21. 0	59·6	61·5
1. 48	33. 0	1. 14	·1402	7. 55	·03165	22. 0	59·5	59·8
2. 8	32. 10	1. 23	·1408	10. 0	·03123	23. 0	59·8	59·9
2. 55	32. 40	2. 9	·1397	12. 41	·03153			
3. 30	33. 40	2. 27	·1404	13. 10	·03137			
3. 43	33. 0		***	13. 49	·03137			
4. 17	33. 0	3. 26	·1409	14. 18	·03120			
4. 35	31. 50	3. 41	·1413	16. 6	·03126			
4. 46	32. 0	3. 55	·1407	17. 57	·03115			
5. 20	30. 30	4. 15	·1403	19. 35	·03124			
5. 33	30. 30	4. 37	·1407	21. 12	·03117			
6. 3	29. 30	4. 43	·1405	21. 56	·03127			
7. 59	29. 0	4. 57	·1411	22. 55	·03105			
8. 9	28. 20	5. 11	·1409	23. 59	·03137			
8. 59	28. 0	5. 19	·1413					
9. 42	27. 10		***					
11. 5	26. 30	5. 54	·1408					
11. 21	27. 30	6. 11	·1412					
	***	9. 26	·1408					
12. 23	26. 30	10. 12	·1408					
12. 36	29. 30	10. 36	·1405					
13. 9	25. 30	10. 54	·1407					
13. 23	27. 10	11. 9	·1403					
13. 37	27. 0	11. 22	·1408					
13. 53	28. 10	11. 44	·1406					
14. 23	22. 40	12. 2	·1407					
14. 44	23. 0	12. 25	·1402					
14. 55	22. 10	12. 47	·1409					
15. 4	23. 25	13. 27	·1405					
15. 26	23. 30	13. 51	·1412					
15. 47	25. 10	14. 28	·1405					
15. 59	25. 10	15. 42	·1399					
16. 14	24. 30	16. 55	·1402					
16. 26	25. 0	17. 34	·1392					
17. 7	23. 0	17. 51	·1398					
17. 37	23. 0	18. 12	·1394					
17. 53	24. 55	18. 42	·1397					
18. 24	23. 15	18. 55	·1393					
18. 41	23. 5	19. 5	·1397					
18. 48	23. 40	19. 54	·1398					
18. 56	21. 25	20. 12	·1393					
[illegible]	22. 40	20. 40	·1393					
19. 20	22. 5	21. 24	·1383					
19. 28	22. 35	22. 6	·1387					
19. 41	22. 30	22. 52	·1389					
20. 23	24. 40	23. 11	·1387					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 3		July 3						
h m	° ′ ″	h m		h m		h m	°	°
20. 28	20. 24. 5	23. 26	·1394					
21. 28	26. 15	23. 42	·1389					
22. 43	30. 5	23. 59	·1392					
23. 9	30. 5							
23. 32	30. 30							
23. 51	30. 30							
23. 59	31. 5							
July 4		July 4		July 4		July 4		
0. 0	20. 31. 5	0. 0	·1392	0. 0	·03137	0. 0	59·8	60·0
0. 14	32. 15	0. 11	·1395	1. 21	·03148	1. 0	60·5	60·7
0. 26	31. 55	0. 36	·1393	3. 11	·03172	3. 0	61·0	61·0
0. 48	31. 30	0. 58	·1398	4. 32	·03235	9. 0	61·1	61·6
0. 56	32. 0	1. 21	·1400	4. 57	·03235	21. 0	59·0	59·8
1. 32	31. 55	1. 50	·1408	6. 12	·03262	22. 0	58·8	60·3
1. 42	32. 20	2. 24	·1403	6. 25	·03276	23. 0	59·1	60·6
2. 21	32. 0	2. 42	·1411	6. 52	·03236			
2. 29	32. 30	2. 53	·1407	7. 10	·03262			
	***	3. 12	·1413	7. 26	·03243			
2. 47	31. 55	3. 22	·1408	7. 41	·03257			
3. 7	31. 55	3. 26	·1413	7. 55	·03238			
3. 19	31. 0	3. 52	·1403	8. 12	·03252			
3. 24	31. 35		***	8. 25	·03242			
3. 55	29. 25	4. 49	·1420	8. 39	·03253			
4. 7	29. 25	5. 13	·1407	9. 21	·03220			
4. 23	28. 20	5. 45	·1415	9. 26	·03225			
4. 44	30. 25	5. 59	·1408	9. 52	·03203			
	***	6. 12	·1407	10. 13	·03174			
5. 51	30. 5	6. 22	·1413	10. 26	·03152			
6. 6	30. 40	6. 41	·1438	11. 9	·03126			
6. 21	27. 10	7. 0	·1399	11. 16	·03132			
6. 28	28. 15	7. 26	·1439	11. 34	·03078			
6. 41	32. 20	7. 41	·1423	12. 6	·03037			
7. 9	10. 10	7. 43	·1431	12. 26	·03030			
7. 25	18. 20	8. 5	·1397	13. 12	·03060			
7. 36	16. 35	8. 15	·1405	13. 34	·03057			
7. 51	25. 45	8. 40	·1392	14. 15	·03064			
8. 7	21. 15	8. 41	·1394	14. 32	·03057			
8. 26	24. 10	8. 50	·1389	14. 53	·03017			
8. 32	24. 10	9. 9	·1396	16. 26	·03060			
8. 43	25. 55	9. 26	·1382	18. 21	·03064			
8. 58	22. 55	11. 12	·1384	19. 15	·03077			
9. 10	22. 55	11. 56	·1420	20. 52	·03063			
9. 23	20. 30	12. 41	·1389	22. 41	·03090			
9. 29	22. 40	15. 35	·1415	23. 59	·03102			
9. 42	22. 5	17. 20	·1403					
9. 50	20. 40	18. 13	·1406					
9. 57	21. 20	18. 34	·1402					
10. 11	16. 50	21. 18	·1391					
10. 19	15. 10	22. 6	·1396					
10. 32	11. 10	22. 25	·1401					
10. 56	17. 30	22. 35	·1394					
11. 8	18. 0	22. 43	·1404					
11. 23	26. 0	22. 58	·1400					
11. 36	26. 0	23. 11	·1403					
11. 49	23. 50	23. 14	·1390					
12. 12	15. 0	23. 34	·1395					
12. 23	13. 40	23. 42	·1408					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 4		July 4						
h m	° ′ ″	h m		h m		h m	°	°
12. 38	20. 14. 40	23. 56	·1402					
12. 49	14. 0	23. 59	·1406					
13. 21	18. 35							
13. 30	17. 50							
14. 7	23. 45							
14. 28	34. 50							
14. 58	24. 30							
15. 25	22. 15							
15. 40	22. 25							
15. 55	23. 20							
16. 9	23. 0							
16. 27	24. 0							
16. 55	22. 35							
17. 7	23. 20							
17. 41	22. 20							
18. 9	23. 20							
18. 38	22. 25							
18. 44	23. 0							
19. 9	22. 10							
19. 24	23. 0							
19. 33	22. 30							
20. 10	23. 0							
20. 21	24. 35							
20. 33	24. 25							
20. 42	21. 40							
	***							
20. 57	23. 45							
21. 8	25. 55							
21. 22	27. 40							
21. 53	27. 40							
22. 0	28. 20							
22. 8	27. 40							
	***							
22. 26	29. 10							
22. 41	29. 0							
23. 34	30. 30							
23. 40	32. 30							
23. 53	32. 0							
23. 59	32. 55							
July 5		July 5		July 5		July 5		
0. 0	20. 32. 55	0. 0	·1406	0. 0	·03102	0. 0	59·4	61·4
0. 26	32. 20	0. 17	·1396	1. 23	·03128	1. 0	59·8	61·6
0. 39	33. 10	0. 25	·1392		***	2. 0	59·6	61·6
1. 3	33. 10	0. 56	·1400	1. 34	·03110	3. 0	60·0	61·8
1. 20	34. 30	1. 6	·1398	1. 53	·03143	9. 0	58·0	61·1
1. 30	34. 0	1. 25	·1412	2. 56	·03164	21. 0	57·6	59·0
1. 38	32. 0	1. 30	·1404	4. 55	·03184			
1. 52	33. 55	1. 38	·1383	5. 0	·03200			
2. 5	33. 55	1. 43	·1387	5. 14	·03183			
2. 11	33. 0	1. 54	·1390	8. 53	·03200			
2. 24	33. 40	2. 11	·1400	11. 12	·03137			
2. 56	32. 50	2. 12	·1395	13. 54	·03100			
3. 18	32. 30	2. 26	·1404	17. 26	·03014			
3. 43	32. 0	3. 14	·1393	20. 16	·03058			
3. 55	32. 15	3. 22	·1398	22. 15	·03062			
4. 54	33. 45	3. 42	·1396	23. 22	·03080			
4. 59	33. 5	3. 56	·1404	23. 59	·03068			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
July 5	
h m	° ' "
5. 12	20. 31. 55
6. 0	32. 30
7. 43	30. 25
9. 26	28. 5
10. 18	27. 35
10. 29	26. 55
11. 7	26. 20
11. 25	27. 5
11. 49	26. 25
12. 25	27. 20
12. 42	26. 55
12. 55	27. 5
13. 26	26. 20
13. 41	26. 20
13. 56	25. 40
14. 6	25. 50
14. 12	24. 50
14. 35	25. 50
15. 26	26. 0
15. 53	25. 10
16. 7	25. 20
	***
17. 6	23. 20
17. 11	24. 30
17. 57	24. 0
18. 4	23. 15
18. 10	24. 10
18. 18	23. 25
18. 26	24. 15
18. 39	23. 30
18. 44	24. 55
20. 11	25. 0
22. 25	28. 10
23. 11	30. 0
23. 47	31. 20
23. 59	31. 15
July 6	
0. 0	20. 31. 15
1. 17	31. 45
1. 42	30. 55
1. 56	31. 5
2. 11	30. 25
2. 26	31. 55
2. 53	31. 15
3. 4	30. 40
3. 11	31. 45
3. 17	31. 0
3. 27	31. 10
4. 19	30. 5
4. 23	31. 15
4. 37	29. 55
4. 56	29. 40
6. 39	30. 40
7. 26	30. 15
7. 45	30. 20
8. 14	27. 50
8. 48	26. 0

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
July 5	
h m	
4. 56	·1404
5. 11	·1422
5. 14	·1415
5. 42	·1408
5. 50	·1413
6. 43	·1411
6. 56	·1415
7. 13	·1411
8. 50	·1408
11. 6	·1409
11. 23	·1412
11. 41	·1405
12. 22	·1402
12. 56	·1408
14. 50	·1402
17. 3	·1402
19. 57	·1401
23. 0	·1396
23. 59	[illegible]
July 6	
0. 0	[illegible]
0. 36	·1400
1. 11	·1400
1. 19	·1402
1. 42	·1400
1. 57	·1403
2. 11	·1401
2. 37	·1416
2. 54	·1408
3. 11	·1410
3. 15	[illegible]
3. 26	·1406
3. 40	·1408
4. 25	·1408
4. 36	·1417
5. 9	·1407
5. 22	·1410
5. 44	·1412
6. 18	·1410
7. 20	·1412

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
July 6	
0. 0	·03103
3. 1	·03123
4. 19	[illegible]
4. 26	·03127
9. 22	·03153
11. 26	·03107
11. 59	·03100
12. 55	·03054
14. 24	·03013
16. 17	·02997
17. 30	·02976
19. 23	·03000
21. 26	·03012
22. 37	·03007
23. 59	·03045

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
July 6		
1. 0	59 ·1	60 ·7
3. 0	[illegible]	60 ·0
9. 0	[illegible]	61 ·[illegible]
21. 0	57 ·[illegible]	59 ·[illegible]

Greenwich Mean Solar Time.	Western Declination.
July 6	
h m	° '
9. 3	20. 26. 35
9. 12	26. 25
9. 34	23. 55
10. 13	23. 10
10. 28	24. 40
10. 33	23. 45
10. 45	25. 55
10. 57	25. 30
11. 11	26. 0
11. 23	25. 20
11. 40	25. 30
11. 54	27. 15
12. 2	30. 55
12. 14	31. 20
12. 48	27. 10
13. 12	24. 45
13. 41	25. 15
14. 12	21. 35
14. 36	21. 30
15. 3	22. 20
15. 16	21. 45
16. 12	23. 20
16. 43	22. 50
17. 22	21. 40
19. 56	23. 30
20. 38	25. 5
22. 42	27. 30
23. 55	31. 0
23. 59	31. 15
July 7	
0. 0	20. 31. 15
0. 10	31. 55
0. 18	31. 55
1. 11	33. 20
1. 40	33. 20
2. 6	33. 55
2. 52	32. 15
3. 14	31. 50
5. 13	[illegible]
6. 22	28. 30
6. 28	29. 20
6. 42	28. 30
7. 23	28. 0
7. 45	28. 10
8. 39	27. 30
9. 12	27. 30
9. 56	27. 40
10. 29	25. 55
11. 11	26. 50
11. 41⁚	25. 40
11. 51	26. 10
12. 4	25. 30
12. 27	25. 30
12. 35	26. 20
12. 51	24. 50
13. 9	26. 5
13. 15	24. 10

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
July 6	
h m	
7. 41	·1416
8. 36	·1407
8. 59	·1410
9. 25	·1408
9. 51	·1414
10. 12	·1410
10. 22	·1404
10. 27	·1408
10. 40	·1404
	***
12. 24	·1408
12. 44	·1404
13. 13	·1413
13. 44	·1404
14. 14	·1411
14. 44	·1402
	***
17. 5	·1401
21. 20	·1385
22. 28	·1383
23. 4	·1384
23. 14	·1387
23. 41	·1391
23. 56	·1389
23. 59	·1390
July 7	
0. 0	·1390
0. 12	·1394
0. 20	·1391
1. 12	[illegible]
1. 45	[illegible]
2. [illegible]	·1402
2. 42	·1405
3. 23	·1405
3. 51	·1402
4. 26	·1407
5. 20	·1407
5. 38	·1397
5. 55	·1402
6. 25	[illegible]
6. 43	·1405
7. 11	·1401
9. 41	·1400
9. 56	·1404
	***
12. 43	·1394
13. 15	·1408
13. 58	·1397
14. 54	·1395
15. 55	·1405
17. 23	·1404
19. 7	·1395
21. 43	·1386

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
July 7	
0. 0	·03045
2. 12	·03077
2. 26	·03068
5. 53	·03137
8. 12	·03155
10. 15	·03096
12. 55	·03058
13. 25	·03040
15. 55	·03019
17. 59	·03023
19. 25	·03047
20. 36	·03052
21. 26	·03037
23. 59	·03076

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
July 7		
1. 0	59 ·0	60 ·6
3. 0	59 ·0	60 ·8
9. 0	58 ·0	59 ·6
21. 20	58 ·1	59 ·8

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Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 7		July 7						
h m	° ′ ″	h m		h m		h m	°	°
13. 40	20. 22. 0	23. 0	·1387					
14. 14	22. 30	23. 59	·1388					
14. 41	27. 25							
14. 56	28. 0							
15. 42	25. 30							
16. 6	23. 35							
16. 26	24. 10							
17. 14	22. 0							
20. 11	24. 5							
20. 43	25. 20							
21. 53	26. 30							
22. 26	26. 5							
23. 59	28. 50							
July 8		July 8		July 8		July 8		
0. 0	20. 28. 50	0. 0	·1388	0. 0	·03076	0. 20	59·9	61·6
1. 12	30. 45	0. 57	·1392	2. 54	·03124	8. 30	60·4	62·6
1. 20	31. 30	1. 20	·1397	4. 40	·03146	21. 0	60·8	62·1
2. 30	31. 45	1. 33	·1397	10. 42	·03200			
3. 11	31. 30	2. 6	·1402	16. 24	·03191			
4. 27	30. 10	2. 14	·1401	23. 38	·03187			
4. 56	30. 10	2. 56	·1406	23. 59	·03192			
5. 54	28. 40	4. 12	·1409					
6. 56	28. 40	5. 0	·1411					
7. 11	29. 25	5. 43	·1405					
7. 26	28. 40	7. 11	·1403					
7. 56	29. 10	7. 50	·1406					
13. 5	26. 55	10. 42	·1404					
13. 25	27. 5	16. 56	·1404					
15. 30	26. 20	17. 26	·1398					
16. 19	25. 40	21. 10	·1389					
16. 56	25. 40	21. 21	·1391					
18. 41	23. 55	21. 44	·1390					
18. 51	24. 0	22. 40	·1399					
19. 33	22. 25	23. 59	·1407					
19. 45	22. 30							
19. 54	21. 55							
20. 11	23. 10							
20. 38	22. 40							
21. 26	22. 55							
22. 21	25. 30							
22. 29	25. 40							
23. 3	27. 0							
23. 19	28. 10							
23. 27	28. 10							
23. 37	28. 45							
23. 59	30. 10							
July 9		July 9		July 9		July 9		
0. 0	20. 30. 10	0. 0	·1407	0. 0	·03192	1. 0	61·5	63·5
0. 21	30. 40	0. 41	·1405	1. 38	·03204	3. 0	62·1	64·3
0. 27	31. 45	0. 44	·1409	4. 12	·03277	9. 0	63·0	65·7
0. 37	31. 10	2. 11	·1412	7. 11	·03296	21. 0	62·4	64·6
	***	2. 15	·1406	10. 26	·03343			
0. 59	32. 40	2. 26	·1410	16. 9	·03300			
2. 8	33. 0		***	16. 26	·03307			
2. 13	32. 25	3. 34	·1415	16. 57	·03296			
2. 21	32. 50	3. 40	·1407	17. 25	·03300			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 9		July 9		July 9				
h m	° ′ ″	h m		h m		h m	°	°
2. 33	20. 32. 30	3. 45	·1409	17. 56	·03277			
2. 38	33. 0	4. 9	·1391	18. 12	·03271			
3. 5	32. 30	4. 24	·1400	19. 12	·03282			
3. 26	32. 45	5. 24	·1405	19. 30	·03288			
3. 37	32. 0	5. 52	·1399	20. 9	·03273			
3. 43	32. 5	6. 12	·1404	21. 36	·03263 ·03411			
3. 55	30. 20	6. 34	·1400					
3. 49	30. 25	7. 36	·1407	23. 11	·03407			
6. 0	31. 0	8. 22	·1400	23. 59	·03426			
6. 26	30. 30	8. 34	·1405					
6. 49	30. 35	8. 54	·1399					
8. 6	29. 30		***					
8. 55	30. 0	10. 13	·1404					
9. 26	28. 55	10. 24	·1397					
9. 40	29. 5	10. 35	·1403					
9. 57	28. 10	10. 55	·1402					
10. 27	28. 20	11. 8	·1407					
10. 54	27. 40		***					
11. 4	28. 20	11. 42	·1405					
12. 4	27. 0	11. 55	·1402					
12. 29	27. 35	12. 12	·1407					
	***		***					
13. 16	26. 30	13. 20	·1400					
13. 26	26. 50	14. 12	·1405					
13. 34	26. 15	15. 14	·1402					
13. 59	26. 40	16. 10	·1388					
	***	16. 57	·1397					
14. 54	25. 30	17. 25	·1390					
	***	17. 43	·1399					
16. 22	25. 30	18. 7	·1393					
16. 27	26. 15	18. 42	·1400					
16. 34	28. 20	19. 20	·1391					
16. 40	26. 15	19. 42	·1394					
16. 43	28. 10	20. 0	·1386					
16. 53	26. 30		***					
17. 8	25. 40	20. 42	·1385					
	***	20. 58	·1384					
17. 25	27. 30	21. 12	·1378					
	***	21. 26	·1379					
17. 43	28. 20	21. 40	·1374					
	***	21. 42	·1379					
18. 6	26. 35	21. 55	·1384					
18. 9	25. 10	22. 0	·1382					
18. 13	26. 30	22. 18	·1394					
	***	22. 26	·1392					
18. 38	27. 10	22. 51	·1398					
18. 42	25. 55	23. 11	·1394					
	***	23. 21	·1385					
19. 8	25. 15	23. 48	·1392					
19. 10	27. 20	23. 59	·1394					
19. 16	24. 5							
19. 21	24. 40							
19. 25	22. 30							
19. 31	27. 20							
19. 38	26. 15							
19. 41	28. 15							
19. 58	26. 35							
20. 8	24. 20							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Reading of Thermometers. Of H. F. Magnet.	Reading of Thermometers. Of V. F. Magnet.
July 9								
h m	° ′ ″	h m		h m		h m	°	°
20. 12	20. 24. 30							
20. 26	27. 50							
20. 28	25. 30							
20. 38	26. 10							
20. 44	24. 40							
20. 56	[illegible]							
21. 9	26. 25							
21. 18	29. 20							
21. 25	28. 40							
21. 33	29. 20							
21. 39	27. 40							
22. 55	31. 40							
23. 14	31. 40							
[illegible]	34. 35							
[illegible]	34. 15							
July 10		July 10		July 10		July 10		
0. 0	20. 24. 15	0. 0	[illegible]	[illegible]	·03426	1. 0	[illegible]	[illegible]
0. 28	33. 30	0. 22	[illegible]	2. 52	·03537	3. 0	[illegible]	[illegible]
[illegible]	34. 1[illegible]	0. 26	[illegible]	4. 0	·03560	9. 0	[illegible]	[illegible]
0. 56	33. 50	0. 50	·1396	[illegible]	·03555	21. 0	63 ·4	64 ·2
1. 4	34. 15	0. 57	[illegible]	[illegible]	[illegible]	22. 0	[illegible]	[illegible]
1. 25	33. 40	1. 12	[illegible]	5. 41	·03580	23. 0	[illegible]	[illegible]
1. 32	[illegible]	1. 27	[illegible]	5. 53	·03577			
1. 41	[illegible]	1. 57	[illegible]	6. 5	·03592			
1. 49	[illegible]	2. 15	·1379	6. 25	·03608			
	***	2. 25	[illegible]	10. 44	·03597			
2. 58	[illegible]	2. 27	[illegible]	12. 58	[illegible]			
3. 10	32. 0	2. 57	[illegible]	14. 22	·03523			
3. 25	32. 30	3. 11	[illegible]	17. 57	[illegible]			
3. 38	31. 0	3. 21	[illegible]	[illegible]	·03488			
[illegible]	31. 20	3. 30	·1391	19. 55	[illegible]			
4. 6	31. 10	[illegible]	·1387	20. 38	·03508			
4. 33	28. 0	4. 11	[illegible]	[illegible]	[illegible]			
[illegible]	28. 50	4. 20	[illegible]					
5. 11	28. 5	[illegible]	·1385					
5. 33	28. 40	[illegible]	[illegible]					
5. 41	28. 15	5. 36	[illegible]					
[illegible]	26. 20	5. 50	·1410					
[illegible]	27. 0	[illegible]	[illegible]					
5. 59	26. 30	6. 8	·1397					
6. 18	19. 20	6. 13	·1385					
6. 26	19. 20	6. 27	[illegible]					
6. 59	24. 0	6. 57	·1398					
7. 23	24. 5	7. 20	[illegible]					
[illegible]	25. 20	7. 40	[illegible]					
[illegible]	25. 0	7. 46	[illegible]					
7. 53	25. 20	8. 33	·1392					
8. 10	24. 55	8. 52	[illegible]					
8. 49	25. 30	9. 11	[illegible]					
8. 58	25. 0	9. 20	[illegible]					
9. 34	25. 50	[illegible]	[illegible]					
[illegible]	25. 0	9. 43	·1392					
[illegible]	25. 0	10. 28	·1390					
10. 26	25. 40	[illegible]	[illegible]					
10. 32	25. 20	10. 56	·1392					
10. 46	26. 0	11. 34	·1389					
11. 3	25. 30	13. 35	[illegible]					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Reading of Thermometers. Of H. F. Magnet.	Reading of Thermometers. Of V. F. Magnet.
July 10		July 10						
h m	° ′ ″	h m		h m		h m	°	°
11. 13	20. 26. 0	14. 12	[illegible]					
11. 44	25. 30	14. 30	[illegible]					
12. 0	26. 20	15. 11	[illegible]					
13. 0	26. 20	15. 57	[illegible]					
13. 30	28. 40	17. 0	·1390					
13. 47	28. 0	18. 10	·1385					
14. 25	24. 25	19. 23	·1381					
14. 54	23. 40	19. 56	·1383					
15. 8	22. 30	20. 23	·1384					
15. 38	21. 15	20. 52	·1379					
15. 54	21. 15	22. 24	·1374					
[illegible]	23. 0	22. 43	·1376					
16. 59	21. 30	22. 59	·1372					
[illegible]	21. 30	23. 26	·1378					
18. 20	22. 15	23. 59	·1376					
18. 26	21. 40							
18. 59	22. 5							
[illegible]	21. 30							
[illegible]	23. 0							
20. 17	21. 20							
20. 31	22. 20							
20. 56	21. 40							
22. 32	25. 30							
22. 44	27. 10							
[illegible]	27. 0							
[illegible]	30. 0							
23. 59	29. 50							
July 11		July 11		July 11		July 11		
[illegible]	20. 29. 50	0. 0	·1376	0. 0	[illegible]	0. 0	[illegible]	65 ·8
[illegible]	29. 35	0. 42	·1381	[illegible]	·03596	1. 0	[illegible]	65 ·9
1. 55	[illegible]	1. 11	·1382	[illegible]	·03596	2. 0	[illegible]	[illegible]
2. 21	29. 40	1. 19	·1380	10. 26	·03623	3. 0	[illegible]	[illegible]
[illegible]	26. 15	1. 56	·1383	12. 11	·03597	9. 0	[illegible]	67 ·4
[illegible]	25. 40	2. 21	·1380	14. 55	[illegible]	21. 0	63 ·5	[illegible]
[illegible]	23. 30	3. 3	·1386	17. 44	[illegible]	22. 0	[illegible]	[illegible]
[illegible]	25. 5	3. 54	·1386	19. 12	·03497	23. 0	64 ·4	64 ·9
9. 56	24. 25	[illegible]	[illegible]	21. 25	·03522			
10. 23	25. 10	6. 6	·1398	23. 23	·03516			
[illegible]	24. 20	6. 26	[illegible]	[illegible]	·03521			
[illegible]	24. 20	[illegible]	[illegible]					
11. 47	25. 25	7. 44	[illegible]					
11. 56	24. 50	7. 55	[illegible]					
[illegible]	25. 5	8. 12	·1392					
12. 24	24. 20	8. 23	[illegible]					
12. 30	24. 55	8. 33	·1392					
13. 9	25. 40	8. 50	·1396					
13. 14	25. 0	9. 56	[illegible]					
13. 28	25. 40	10. 26	[illegible]					
13. 38	[illegible]	10. 56	[illegible]					
13. 56	27. 10	11. 27	[illegible]					
14. 14	27. 40	11. 51	[illegible]					
14. 36	25. 20	12. 15	[illegible]					
[illegible]	23. 0	12. 44	·1391					
15. 46	22. 10	13. 13	·1395					
16. 0	21. 15	13. 27	·1392					
[illegible]	21. 20	14. 25	[illegible]					
16. 41	22. 10	14. 54	[illegible]					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 11		July 11						
h m	° ′ ″	h m		h m		h m	°	°
16.53	20. 21. 50	15. 42	·1396					
17. 13	22. 25	16. 3	·1398					
17. 54	21. 30	16. 56	·1392					
	***	17. 30	·1392					
18. 45	20. 55	18. 23	·1389					
18. 59	21. 55	18. 45	·1386					
19. 9	21. 20	19. 12	·1387					
19. 54	21. 50	19. 43	·1388					
20. 5	22. 30	20. 18	·1383					
20. 11	21. 50	20. 54	·1379					
20. 43	22. 40	21. 12	·1380					
	***	21. 41	·1376					
21. 25	24. 10	23. 59	·1390					
22. 21	27. 20							
22. 53	27. 55							
23. 11	29. 20							
23. 34	29. 20							
23. 59	30. 15							
July 12		July 12		July 12		July 12		
0. 0	20. 30. 15	0. 0	·1390	0. 0	·03521	0. 0	63·9	65·1
1. 14	31. 0	0. 12	·1389	2. 29	·03556	1. 0	65·0	66·1
1. 40	32. 10	0. 40	·1391	4. 11	·03600	2. 0	63·9	66·1
2. 15	31. 30	1. 14	·1388	4. 22	·03596	3. 0	65·0	66·1
2. 40	30. 30	1. 25	·1391	4. 38	·03616	9. 0	65·3	67·7
3. 56	29. 20	4. 12	·1397	4. 44	·03607	21. 0	65·0	66·4
4. 19	27. 45	4. 26	·1387	6. 49	·03612			
4. 26	27. 45	4. 40	·1395	11. 25	·03620			
4. 32	28. 40	4. 48	·1412	11. 29	·03605			
4. 40	28. 15	4. 53	·1408	11. 42	·03622			
4. 54	28. 30	5. 11	·1406	13. 12	·03566			
5. 11	27. 55	5. 21	·1401	13. 41	·03521			
6. 40	28. 0	5. 29	·1405	14. 13	·03486			
6. 55	28. 35	5. 49	·1404	14. 24	·03456			
7. 8	28. 0	6. 5	·1407	14. 55	·03427			
7. 19	28. 0	6. 50	·1407	15. 23	·03403			
7. 47	25. 55	7. 0	·1414	15. 50	·03382			
7. 56	26. 30	7. 11	·1405	15. 58	·03353			
8. 13	26. 30	7. 41	·1412	16. 7	·03372			
8. 37	24. 35	7. 44	·1405	16. 14	·03364			
8. 58	24. 25	7. 51	·1407	16. 26	·03363			
9. 13	23. 30	8. 20	·1405	17. 34	·03462			
9. 26	23. 30	8. 34	·1406	18. 28	·03503			
10. 13	25. 50	8. 44	·1411	22. 11	·03528			
10. 26	25. 0	8. 57	·1407	22. 18	·03518			
10. 40	25. 0	9. 20	·1405	23. 59	·03557			
10. 55	25. 40	9. 33	·1407					
11. 18	24. 40	9. 50	·1403					
11. 23	22. 50	10. 11	·1406					
11. 32	23. 55	10. 3	·1401					
11. 41	25. 40	10. 55	·1411					
11. 54	25. 30	11. 12	·1409					
12. 9	27. 5	11. 25	·1410					
12. 43	24. 30	11. 35	·1385					
12. 50	25. 10	11. 53	·1403					
12. 56	24. 25	11. 59	·1391					
13. 4	25. 30	12. 10	·1403					
13. 10	22. 30	12. 20	·1404					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 12		July 12						
h m	° ′ ″	h m		h m		h m	°	°
13. 38	20. 16. 20	12. 37	·1399					
14. 7	18. 0	12. 59	·1399					
14. 11	19. 0	13. 29	·1417					
14. 14	19. 40	13. 55	·1400					
14. 44	11. 20	14. 20	·1405					
15. 2	15. 10	14. 35	·1397					
15. 9	15. 0	15. 0	·1412					
15. 18	17. 0	15. 24	·1407					
15. 23	16. 40	15. 41	·1412					
15. 35	20. 30	15. 45	·1407					
	***	16. 0	·1410					
16. 3	20. 50	16. 12	·1397					
16. 6	16. 15	16. 13	·1402					
16. 9	19. 20	16. 24	·1398					
16. 16	14. 30	16. 35	·1389					
16. 23	14. 20		***					
16. 29	10. 55	17. 12	·1374					
16. 57	15. 40	17. 34	·1370					
16. 59	14. 30	17. 57	·1375					
17. 6	17. 20	18. 20	·1372					
17. 11	16. 20	18. 51	·1371					
17. 16	18. 25	19. 3	·1379					
17. 23	18. 20	19. 59	·1373					
17. 31	16. 20	20. 22	·1366					
17. 38	16. 50	20. 55	·1367					
17. 41	14. 35	21. 12	·1358					
17. 53	14. 30	21. 41	·1355					
17. 56	16. 0	21. 50	·1356					
	***	21. 57	·1352					
18. 29	14. 40	22. 10	·1360					
	***	22. 18	·1353					
18. 41	15. 5	22. 26	·1342					
18. 48	13. 40	22. 44	·1343					
19. 6	16. 30	23. 21	·1354					
19. 13	15. 45	23. 59	·1364					
19. 18	15. 20							
19. 25	16. 30							
19. 34	16. 0							
19. 56	16. 10							
20. 2	17. 30							
20. 10	17. 25							
20. 22	18. 15							
20. 26	17. 10							
20. 55	20. 30							
20. 58	20. 30							
21. 8	21. 40							
21. 16	20. 0							
21. 26	22. 30							
21. 39	22. 30							
21. 53	24. 20							
21. 56	23. 50							
	***							
22. 11	27. 35							
22. 26	26. 30							
22. 34	27. 35							
22. 40	27. 30							
23. 9	29. 30							
23. 24	31. 55							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 12								
h m	′ ″	h m		h m		h m	°	°
23. 34	20. 31. 25							
23. 59	32. 55							
July 13		July 13		July 13		July 13		
0. 0	20. 32. 55	0. 0	·1364	0. 0	·03557	1. 0	65·7	67·2
0. 7	33. 0	0. 18	·1368		***	3. 0	66·9	68·0
0. 11	32. 15	0. 22	·1364	2. 36	·03623	9. 0	66·4	68·7
0. 16	33. 20	0. 40	·1375	4. 59	·03663	21. 0	65·6	68·0
0. 24	33. 25	0. 42	·1370	8. 28	·03662			
0. 27	32. 15	0. 48	·1377	10. 37	·03676			
0. 39	33. 40	0. 55	·1375	10. 57	·03663			
0. 43	32. 50	1. 11	·1377	11. 55	·03674			
1. 6	33. 30	1. 21	·1372	13. 43	·03644			
1. 26	33. 10	1. 33	·1374	14. 23	·03639			
1. 33	34. 40	1. 41	·1368	15. 45	·03617			
2. 36	31. 25	1. 51	·1376	16. 47	·03612			
2. 52	31. 35	1. 55	·1373	17. 13	·03606			
3. 9	30. 15	2. 6	·1384	20. 29	·03634			
3. 18	30. 50	2. 12	·1380	22. 55	·03584			
3. 43	29. 35	2. 26	·1379	23. 59	·03606			
4. 21	29. 30	2. 54	·1392					
4. 30	28. 40	3. 11	·1380					
4. 39	29. 0	3. 26	·1386					
4. 51	28. 0							
5. 38	27. 40	4. 12	·1391					
5. 44	27. 55	4. 20	·1395					
6. 13	27. 0	4. 34	·1391					
6. 23	27. 30	4. 41	·1349					
6. 42	26. 20	4. 51	·1391					
7. 19	26. 20	5. 18	·1398					
7. 27	26. 55	5. 34	·1386					
7. 40	26. 15	5. 54	·1393					
8. 11	26. 55	6. 19	·1391					
8. 47	25. 25	6. 30	·1398					
9. 23	26. 0	6. 48	·1394					
9. 36	25. 30	7. 35	·1397					
9. 50	25. 55	7. 56	·1393					
9. 58	25. 20	8. 23	·1396					
10. 17	26. 10	8. 35	·1393					
10. 26	25. 50	8. 54	·1390					
10. 47	26. 30	9. 7	·1393					
10. 57	22. 50	9. 13	·1394					
11. 12	19. 40	9. 26	·1390					
11. 34	22. 10	9. 43	·1392					
12. 7	24. 30	9. 54	·1389					
12. 13	23. 20	10. 11	·1395					
12. 48	26. 30	10. 36	·1393					
13. 10	25. 25	10. 44	·1396					
13. 18	25. 30		***					
13. 29	23. 30	11. 34	·1383					
13. 54	23. 30	11. 37	·1385					
14. 10	25. 10	12. 11	·1384					
14. 26	24. 35	12. 27	·1388					
14. 39	24. 40	12. 42	·1386					
15. 11	22. 25	13. 18	·1391					
15. 21	22. 55	13. 37	·1390					
15. 47	21. 30	13. 56	·1384					
15. 56	22. 10	14. 19	·1384					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 13		July 13						
h m	° ′ ″	h m		h m		h m	°	°
16. 21	20. 22. 10	14. 55	·1389					
16. 33	22. 40	15. 24	·1393					
16. 41	23. 40	15. 34	·1389					
17. 3	22. 35	16. 6	·1384					
17. 7	22. 55	16. 29	·1384					
17. 11	22. 20	17. 0	·1387					
17. 22	22. 25	18. 43	·1375					
17. 26	21. 40	19. 39	·1373					
17. 41	21. 40	19. 56	·1370					
17. 46	22. 10	21. 40	·1364					
18. 4	21. 15	22. 55	·1372					
18. 46	20. 40	23. 59	·1376					
19. 43	21. 15							
20. 9	20. 20							
20. 24	21. 55							
20. 51	23. 0							
21. 9	23. 0							
22. 43	25. 40							
23. 59	30. 20							
July 14		July 14		July 14		July 14		
0. 0	20. 30. 20	0. 0	·1376	0. 0	·03606	1. 0	66·3	68·0
1. 3	32. 50	0. 40	·1382	4. 58	·03700	3. 0	66·6	69·0
3. 38	29. 15	2. 15	·1386	6. 42	·03703	9. 0	67·0	68·4
4. 12	29. 35	2. 32	·1384	7. 6	·03717	22. 0	65·5	65·7
4. 40	29. 25	2. 57	·1387	7. 22	·03708			
4. 51	28. 30	3. 43	·1384	8. 51	·03714			
4. 56	29. 0	3. 52	·1386	10. 4	·03717			
5. 13	28. 20	4. 44	·1387	10. 12	·03704			
5. 46	28. 0	4. 54	·1383	10. 34	·03717			
5. 54	28. 20	5. 11	·1392	10. 53	·03700			
6. 10	27. 50	5. 14	·1389	11. 43	·03686			
6. 22	27. 55	5. 26	·1393	12. 40	·03623			
6. 47	23. 35	5. 44	·1390	13. 2	·03635			
6. 54	23. 25	6. 3	·1396	17. 44	·03577			
7. 12	25. 30	6. 12	·1393	18. 39	·03560			
7. 36	24. 0	6. 25	·1395	19. 15	·03573			
7. 43	25. 0	6. 42	·1384	21. 51	·03568			
7. 52	24. 40	7. 2	·1405	22. 26	·03580			
7. 56	25. 5	7. 12	·1404	23. 59	·03580			
8. 13	25. 0	7. 40	·1396					
8. 23	23. 20	7. 44	·1399					
8. 31	23. 25	7. 56	·1397					
8. 47	24. 50	8. 0	·1399					
9. 6	24. 50	8. 11	·1392					
9. 51	20. 55	8. 18	·1397					
9. 58	21. 20	8. 29	·1390					
10. 9	20. 20	8. 41	·1393					
10. 24	21. 0	9. 6	·1389					
10. 39	24. 0	9. 12	·1385					
10. 56	20. 25	9. 51	·1385					
11. 4	20. 0	10. 5	·1393					
11. 33	23. 20	10. 11	·1382					
11. 40	25. 55	10. 20	·1379					
11. 48	23. 0	10. 36	·1382					
12. 7	19. 0	10. 50	·1377					
12. 26	21. 20	11. 40	·1383					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 14		July 14						
h m	° ′ ″	h m		h m		h m	°	°
12. 58	20. 20. 20	11. 51	·1377					
13. 4	21. 40	12. 8	·1379					
13. 37	23. 35	12. 22	·1395					
14. 16	24. 40	12. 41	·1385					
14. 43	23. 40	13. 7	·1390					
15. 25	22. 55	13. 41	·1387					
15. 56	22. 35	14. 47	·1389					
	***	15. 40	·1386					
17. 9	19. 20	16. 15	·1390					
17. 18	19. 45	16. 53	·1390					
17. 26	19. 30	17. 36	·1385					
18. 7	20. 0	17. 51	·1386					
18. 21	19. 40	18. 55	·1380					
18. 42	19. 55	21. 21	·1366					
18. 59	19. 40	21. 50	·1371					
19. 9	20. 20	22. 15	·1366					
19. 30	20. 0	23. 24	·1372					
19. 50	20. 25	23. 59	·1374					
20. 8	20. 10							
20. 15	21. 0							
21. 38	21. 40							
23. 47	29. 5							
23. 59	29. 15							
July 15		July 15		July 15		July 15		
0. 0	20. 29. 15	0. 0	·1374	0. 0	·03580	1. 0	66·0	66·6
0. 46	31. 25	0. 22	·1382	3. 12	·03646	9. 0	66·8	68·0
0. 58	32. 40	0. 27	·1377	3. 21	·03660	21. 0	65·5	65·8
1. 7	32. 30	0. 50	·1377		***			
2. 13	34. 30	0. 56	·1384	5. 11	·03691			
2. 29	33. 30	1. 1	·1379	9. 30	·03702			
3. 11	34. 5	1. 12	·1382	10. 12	·03695			
3. 16	33. 0	1. 57	·1387	10. 43	·03649			
3. 32	33. 50	2. 12	·1393	11. 55	·03619			
4. 6	32. 30	2. 28	·1388	14. 3	·03583			
4. 21	32. 55	2. 45	·1395	14. 26	·03562			
4. 28	31. 45	3. 12	·1392	15. 12	·03560			
4. 41	30. 55	3. 21	·1383	17. 29	·03505			
4. 47	29. 30	3. 42	·1398	18. 20	·03522			
	***	4. 11	·1396	18. 26	·03517			
5. 11	28. 30	4. 21	·1389	18. 52	·03537			
5. 24	28. 30	4. 30	·1380	19. 4	·03524			
5. 41	29. 30	4. 41	·1383	19. 19	·03538			
7. 6	28. 40	4. 48	·1375	19. 32	·03529			
7. 33	27. 35	5. 41	·1391	20. 57	·03533			
	***	5. 55	·1388		***			
8. 26	27. 40	6. 10	·1396	21. 12	·03544			
9. 16	25. 40	6. 12	·1393	21. 25	·03544			
9. 39	22. 15	6. 40	·1393		(†)			
9. 44	22. 15	7. 0	·1404					
10. 12	18. 20	7. 44	·1401					
10. 21	18. 35	8. 11	·1395					
10. 26	20. 20	9. 1	·1396					
10. 36	19. 30	9. 25	·1387					
11. 25	22. 50	9. 30	·1381					
11. 42	22. 30	9. 43	·1386					
11. 53	23. 0	9. 55	·1384					
11. 58	24. 35	10. 9	·1386					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 15		July 15						
h m	° ′ ″	h m		h m		h m	°	°
12. 9	20. 23. 20	10. 40	·1403					
12. 34	25. 30	10. 56	·1398					
12. 52	25. 30	11. 15	·1389					
13. 4	23. 55	11. 40	·1396					
13. 18	24. 10	11. 57	·1385					
13. 33	25. 25	12. 36	·1395					
13. 54	25. 25	12. 44	·1389					
14. 6	25. 55	13. 14	·1393					
14. 12	27. 30	13. 29	·1390					
14. 38	25. 0	14. 0	·1395					
14. 53	25. 0	14. 51	·1393					
15. 9	24. 30	15. 25	·1396					
15. 44	28. 20	15. 49	·1392					
16. 12	27. 0	16. 15	·1397					
16. 18	25. 45		***					
16. 23	26. 0	17. 52	·1392					
16. 40	23. 25	18. 9	·1396					
16. 47	23. 50	18. 24	·1389					
	***	18. 42	·1396					
17. 30	22. 55	19. 0	·1376					
17. 39	21. 35	19. 11	·1383					
17. 47	21. 35	19. 22	·1373					
17. 51	22. 45	19. 42	·1373					
17. 56	21. 50	20. 10	·1383					
18. 3	21. 40		***					
18. 7	22. 15	20. 51	·1378					
18. 18	21. 50	21. 10	·1383					
18. 23	22. 45	21. 18	·1378					
18. 26	20. 40	21. 44	·1377					
18. 32	20. 0	22. 14	·1375					
18. 51	25. 40	22. 57	·1363					
19. 6	23. 15		***					
19. 21	30. 50	23. 21	·1370					
19. 28	30. 50	23. 45	·1365					
19. 40	29. 50	23. 59	·1370					
19. 51	29. 50							
20. 6	30. 30							
20. 10	31. 40							
20. 13	30. 40							
20. 19	31. 20							
20. 21	28. 10							
20. 26	29. 50							
20. 28	26. 20							
20. 34	27. 40							
20. 42	26. 10							
20. 56	25. 20							
21. 9	27. 0							
21. 18	25. 20							
21. 57	28. 20							
22. 0	28. 0							
22. 25	28. 45							
22. 31	27. 50							
22. 38	29. 5							
22. 55	26. 0							
23. 14	27. 50							
23. 40	27. 50							
23. 59	30. 20							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
July 16	
h m	° ′ ″
0. 0	20. 30. 20
0. 11	30. 20
0. 23	31. 5
0. 41	30. 15
	***
1. 38	32. 20
1. 43	32. 0
2. 6	32. 45
2. 16	31. 55
	***
3. 11	32. 10
	***
3. 58	31. 0
4. 6	31. 55
4. 18	30. 40
4. 27	31. 25
5. 22	29. 5
5. 28	29. 30
5. 50	28. 15
5. 58	25. 30
6. 21	27. 10
7. 23	27. 40
7. 41	26. 30
7. 55	27. 0
8. 7	26. 40
8. 28	27. 20
8. 41	27. 10
8. 59	24. 40
9. 33	25. 25
10. 6	25. 30
10. 38	28. 10
10. 56	27. 0
11. 8	25. 25
11. 24	24. 20
11. 50	25. 30
12. 12	24. 30
12. 24	25. 0
12. 30	24. 10
13. 13	24. 30
13. 37	31. 35
13. 49	30. 20
13. 55	30. 5
14. 9	27. 10
14. 20	27. 30
15. 7	24. 30
15. 16	24. 20
15. 23	23. 10
15. 24	24. 0
	***
16. 6	22. 50
16. 11	23. 0
16. 26	22. 30
16. 56	22. 20
17. 23	21. 30
17. 51	21. 30
18. 22	20. 30
18. 46	19. 30
	***

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
July 16	
h m	
0. 0	·1370
0. 42	·1378
1. 11	·1390
1. 20	·1385
	***
1. 44	·1382
1. 56	·1384
2. 8	·1379
2. 23	·1387
	***
2. 44	·1384
3. 7	·1389
3. 24	·1384
3. 28	·1391
	***
3. 53	·1382
4. 5	·1392
4. 15	·1381
4. 28	·1387
4. 34	·1383
4. 42	·1387
4. 55	·1380
5. 11	·1386
5. 20	·1382
5. 34	·1387
5. 51	·1378
6. 3	·1388
6. 15	·1391
6. 26	·1388
6. 50	·1393
7. 14	·1390
7. 27	·1393
7. 40	·1391
7. 50	·1394
	***
9. 11	·1393
9. 27	·1391
10. 6	·1393
10. 34	·1409
11. 9	·1396
11. 37	·1391
11. 45	·1394
	***
12. 30	·1390
12. 43	·1394
13. 15	·1388
13. 43	·1385
14. 11	·1392
14. 20	·1396
14. 43	·1390
15. 23	·1396
15. 30	·1390
15. 56	·1390
17. 11	·1394
17. 43	·1392
	***
19. 20	·1384
19. 27	·1387

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
July 16	
h m	
	(†)
0. 26	·03552
1. 26	·03568
	***
2. 52	·03620
5. 43	·03663
6 11	·03677
9. 26	·03660
10. 10	·03624
10. 59	·03556
13. 35	·03523
14. 12	·03493
16. 24	·03502
17. 20	·03497
19. 19	·03518
22. 56	·03520
23. 59	·03537

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 16		
h m		
1. 0	65·9	67·0
3. 0	66·4	67·9
9. 0	66·6	68·2
21. 0	64·1	65·0

Greenwich Mean Solar Time.	Western Declination.
July 16	
h m	° ′ ″
19. 33	20. 21. 10
19. 44	20. 30
20. 24	21. 20
20. 34	22. 15
20. 45	21. 40
21. 23	24. 0
21. 40	23. 25
21. 54	22. 35
22. 0	23. 45
22. 6	22. 50
22. 13	24. 20
22. 29	25. 10
22. 43	25. 0
22. 57	26. 40
23. 0	27. 55
23. 4	27. 0
23. 23:	26. 20
23. 43	28. 5
23. 59	28. 40
July 17	
0. 0	20. 28. 40
0. 9	29. 30
0. 54	30. 0
1. 3	30. 40
1. 46	32. 45
2. 7	32. 40
	***
2. 25	34. 0
2. 32	30. 45
2. 38	30. 20
2. 47	31. 30
2. 57	28. 40
3. 11	27. 50
3. 32	29. 5
4. 33	28. 55
5. 53	26. 50
6. 42	26. 30
6. 59	25. 40
7. 11	26. 15
7. 43	26. 25
7. 47	27. 40
7. 52	26. 10
7. 59	26. 15
8. 11	25. 25
8. 26	25. 25
8. 47	19. 0
8. 57	18. 20
9. 11	21. 20
9. 19	14. 15
9. 36	24. 10
9. 43	23. 50
9. 54	24. 0
10. 6	25. 0
10. 14	23. 10
10. 22	23. 40
10. 30	22. 50
10. 41	22. 50

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
July 16	
h m	
20. 20	·1378
20. 27	·1381
20. 45	·1376
21. 52	·1371
	***
22. 53	·1371
23. 12	·1364
23. 35	·1371
23. 43	·1367
23. 59	·1370
July 17	
0. 0	·1370
0. 41	·1379
0. 56	·1385
2. 0	·1391
2. 12	·1383
2. 20	·1387
2. 29	·1374
2. 50	·1372
3. 18	·1399
3. 35	·1400
3. 50	·1396
4. 33	·1398
5. 12	·1394
5. 26	·1399
6. 8	.1399
6. 29	·1396
6. 43	·1398
6. 53	·1403
7. 15	·1393
7. 51	·1398
8. 0	·1406
8. 40	·1403
8. 49	·1395
8. 57	·1402
9. 14	·1394
9. 23	·1397
9. 33	·1430
9. 51	·1409
10. 16	·1391
10. 48	·1389
11. 12	·1390
11. 45	·1399
11. 58	·1395
12. 26	·1402
	***
13. 10	·1396
13. 43	·1404

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
July 17	
0. 0	·03537
0. 41	·03552
2. 19	·03603
2. 27	·03594
3. 8	·03617
3. 57	·03603
7. 8	·03619
8. 28	·03557
8. 42	·03537
9. 21	·03523
9. 55	·03474
11. 41	·03457
16. 55	·03238
17. 42	·03243
18. 23	·03243
21. 11	·03272
23. 59	·03348

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
July 17		
1. 0	65·1	66·5
3. 0	65·6	67·0
9. 0	62·6	63·9
13. 0	59·5	60·2
21. 0	61·9	63·0
22. 0	62·8	63·0
23. 0	62·6	63·6

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 17		July 17						
h m	° ′ ″	h m		h m		h m	°	°
10. 57	20. 24. 10	14. 0	·1399					
11. 8	23. 0	14. 15	·1398					
11. 33	24. 25	14. 41	·1403					
11. 41	25. 25	15. 14	·1402					
11. 59	25. 35	15. 44	·1406					
12. 21	25. 0	16. 40	·1410					
12. 37	26. 5	17. 26	·1392					
13. 10	29. 25	18. 11	·1399					
13. 35	27. 30	19. 12	·1398					
14. 3	26. 10	19. 54	·1394					
14. 13	26. 40	20. 42	·1392					
14. 53	25. 10	22. 35	·1385					
14. 56	26. 0	22. 54	·1381					
15. 17	24. 0	23. 15	·1385					
15. 50	26. 30	23. 51	·1384					
16. 24	24. 30	23. 59	·1386					
16. 31	24. 40							
16. 39	24. 10							
16. 47	25. 25							
16. 58	23. 35							
17. 9	24. 0							
17. 21	23. 10							
17. 43	24. 40							
17. 53	26. 30							
18. 8	25. 10							
18. 14	25. 30							
18. 21	23. 25							
	* * *							
18. 56	20. 25							
	* * *							
19. 33	20. 35							
19. 53	20. 0							
20. 6	21. 0							
20. 12	20. 20							
21. 18	22. 30							
22. 32	27. 0							
22. 43	27. 5							
23. 8	29. 5							
23. 34	30. 25							
23. 52	30. 55							
23. 59	31. 10							
July 18		July 18		July 18		July 18		
0. 0	20. 31. 10	0. 0	·1386	0. 0	·03348	0. 0	63·0	64·2
0. 14	30. 40	0. 34	·1392	3. 32	·03417	1. 0	63·7	65·0
1. 8	32. 20	0. 40	·1394	8. 55	·03486	2. 0	63·8	65·2
1. 12	32. 10	1. 12	·1395	9. 52	·03424	3. 0	63·8	65·2
1. 21	33. 5	1. 30	·1402	11. 43	·03356	9. 0	62·8	63·6
1. 28	33. 30	1. 59	·1395	13. 22	·03304	21. 0	61·6	62·5
2. 43	31. 35	2. 21	·1398	14. 42	·03283	22. 0	62·1	63·3
3. 10	30. 5	2. 43	·1400	15. 40	·03253	23. 0	62·2	63·7
3. 27	30. 5	2. 54	·1403	17. 20	·03224			
3. 56	29. 10	3. 15	·1397	17. 56	·03231			
4. 9	29. 35	3. 25	·1399	19. 12	·03258			
4. 37	28. 5	3. 55	·1399	21. 13	·03282			
4. 41	28. 30	4. 25	·1394	23. 59	·03306			
4. 55	28. 0	5. 25	·1398					
6. 4	28. 30	5. 44	·1402					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 18		July 18						
h m	° ′ ″	h m		h m		h m	°	°
7. 41	20. 26. 40	6. 12	·1403					
7. 49	25. 40	7. 0	·1404					
7. 56	25. 50	7. 20	·1408					
8. 11	26. 30	7. 55	·1404					
8. 25	26. 20	8. 43	·1406					
8. 54	27. 0	8. 52	·1408					
9. 24	26. 20	9. 20	·1400					
10. 31	26. 20	9. 42	·1402					
11. 26	26. 0	10. 41	·1407					
11. 43	26. 30	10. 56	·1404					
11. 56	26. 0		* * *					
13. 56	24. 30	14. 41	·1406					
14. 13	25. 40	15. 12	·1409					
14. 39	24. 30	16. 0	·1400					
14. 44	25. 25	16. 40	·1404					
15. 36	23. 20	17. 11	·1407					
16. 6	25. 40	17. 25	·1405					
16. 26	25. 20	18. 12	·1402					
16. 41	26. 10	18. 47	·1397					
16. 50	24. 45	19. 0	·1398					
16. 54	25. 20	20. 58	·1389					
16. 59	25. 20	21. 25	·1391					
17. 3	25. 55	21. 59	·1385					
17. 8	23. 55	22. 43	·1384					
17. 12	23. 30	23. 59	·1390					
17. 26	21. 55							
17. 37	23. 20							
18. 9	22. 10							
19. 22	24. 30							
20. 5	23. 40							
20. 27	24. 25							
20. 38	23. 40							
20. 54	24. 0							
21. 3	23. 25							
21. 46	25. 15							
21. 56	25. 0							
22. 38	26. 30							
23. 11	29. 0							
23. 46	29. 50							
23. 59	29. 55							
July 19		July 19		July 19		July 19		
0. 0	20. 29. 55	0. 0	·1390	0. 0	·03306	0. 0	63·6	65·4
2. 23	30. 25	0. 41	·1393	2. 41	·03397	1. 0	63·6	65·5
2. 56	30. 5	0. 53	·1395	5. 53	·03452	3. 0	63·9	65·5
3. 14	30. 5	1. 20	·1393	8. 54	·03403	9. 0	63·9	65·5
3. 41	29. 15	1. 58	·1398	11. 10	·03354	21. 0	58·9	60·0
5. 29	27. 10	2. 12	·1396	12. 40	·03303			
7. 17	28. 0	2. 43	·1401	15. 5	·03262			
8. 25	27. 35	3. 7	·1397	17. 34	·03200			
9. 7	27. 35	3. 36	·1400	20. 20	·03196			
10. 30	24. 20	3. 55	·1399	22. 39	·03166			
11. 13	26. 0	4. 29	·1400	23. 59	·03194			
11. 25	27. 20	5. 43	·1408					
11. 38	27. 25	6. 54	·1406					
12. 11	25. 30	7. 12	·1408					
13. 28	24. 55	7. 51	·1406					
13. 41	25. 20	9. 12	·1405					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
July 19		July 19						
h m	° ′ ″	h m		h m		h m	°	°
15. 6	20. 23. 40	9. 27	·1399					
15. 54	23. 45	9. 56	·1399					
16. 41	23. 10		***					
	***	10. 44	·1406					
17. 47	23. 45	11. 25	·1404					
18. 23	23. 0	11. 51	·1409					
18. 28	23. 40		***					
18. 41	22. 30	13. 50	·1404					
18. 51	22. 30	16. 42	·1406					
18. 56	23. 15	17. 12	·1400					
19. 3	22. 20	17. 40	·1405					
19. 6	23. 10	18. 26	·1406					
19. 12	22. 30	18. 56	·1401					
20. 36	24. 10	20. 11	·1400					
20. 43	25. 0	21. 5	·1394					
21. 34	25. 0	22. 41	·1392					
21. 56	26. 0	23. 59	·1404					
22. 41	26. 55							
23. 34	29. 55							
23. 59	30. 5							
July 20		July 20		July 20		July 20		
0. 0	20. 30. 5	0. 0	·1404	0. 0	·03194	1. 0	61 ·5	63 ·1
1. 39	31. 50	1. 5	·1407	4. 56	·03331	3. 0	62 ·1	64 ·0
2. 23	31. 45	3. 10	·1412	7. 27	·03340	9. 0	62 ·0	64 ·0
3. 7	29. 55	7. 12	·1415	9. 19	·03357	13. 0	58 ·2	59 ·8
4. 43	28. 20	8. 52	·1412	11. 36	·03277	21. 0	60 ·2	61 ·0
5. 33	28. 50	9. 11	·1414	17. 45	·03144			
6. 22	28. 30	9. 20	·1408	20. 38	·03192			
7. 53	27. 20	9. 56	·1412	23. 59	·03220			
8. 30	27. 20	11. 33	·1412					
8. 46	26. 30	12. 25	·1410					
9. 24	26. 30	13. 30	·1409					
9. 39	25. 40	13. 56	·1413					
9. 57	26. 0	14. 24	·1411					
11. 26	25. 20	15. 10	·1414					
11. 39	25. 40	15. 26	·1411					
11. 52	25. 15	16. 7	·1414					
13. 36	24. 50	19. 10	·1409					
14. 6	26. 0	21. 22	·1399					
14. 11	25. 40	21. 43	·1397					
14. 36	27. 0		***					
15. 19	24. 40	23. 12	·1400					
15. 57	24. 30	23. 59	·1406					
16. 14	23. 0							
16. 42	22. 35							
17. 11	21. 50							
17. 43	21. 0							
18. 56	21. 30							
19. 40	20. 40							
20. 14	21. 0							
22. 23	25. 20							
23. 51	31. 20							
23. 59	31. 30							
July 21		July 21		July 21		July 21		
0. 0	20. 31. 30	0. 0	·1406	0. 0	·03220	1. 0	62 ·0	62 ·0
1. 43	33. 20	0. 40	·1410	2. 49	·03317	3. 0	62 ·1	64 ·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
July 21		July 21		July 21		July 21		
h m	° ′ ″	h m		h m		h m	°	°
3. 2	20. 32. 10	1. 54	·1414	9. 12	·03397	9. 0	63 ·1	64 ·5
5. 12	27. 20	3. 9	·1412	17. 40	·03243	22. 0	61 ·6	63 ·5
5. 44	26. 50	3. 12	·1415	19. 43	·03276			
6. 49	26. 55	3. 26	·1412	21. 56	·03268			
7. 13	27. 15	4. 6	·1404	23. 59	·03302			
7. 27	26. 40	4. 12	·1408					
8. 26	26. 10	4. 22	·1406					
9. 47	26. 45	4. 36	·1409					
10. 17	26. 0	4. 43	·1407					
10. 26	26. 20	5. 12	·1409					
10. 41	25. 25	5. 26	·1407					
10. 59	26. 20	5. 43	·1411					
13. 9	25. 0	6. 0	·1408					
13. 14	25. 30	6. 45	·1411					
13. 55	24. 40	7. 21	·1415					
15. 36	23. 20	8. 0	·1409					
16. 42	21. 45	8. 20	·1414					
16. 52	22. 0	8. 50	·1411					
17. 9	21. 10	9. 10	·1411					
17. 25	20. 30	9. 19	·1414					
17. 33	22. 0	10. 9	·1412					
17. 36	20. 45	10. 15	·1410					
17. 40	21. 10	10. 40	·1408					
17. 42	19. 55	10. 58	·1415					
17. 57	21. 25	11. 43	·1410					
18. 20	19. 50	11. 55	·1415					
18. 28	20. 45	12. 10	·1411					
18. 41	20. 10	13. 41	·1406					
	***	14. 20	·1407					
19. 10	20. 55	14. 55	·1405					
19. 23	19. 40	15. 40	·1409					
19. 39	21. 30	18. 6	·1408					
19. 48	21. 30	18. 55	·1403					
19. 59	22. 20	20. 10	·1393					
20. 7	21. 20	21. 25	·1390					
20. 42	22. 40	22. 0	·1393					
20. 58	22. 10	23. 5	·1395					
21. 12	23. 20	23. 26	·1398					
21. 17	23. 20	23. 59	·1402					
22. 21	27. 5							
22. 41	27. 25							
23. 26	30. 50							
23. 56	32. 0							
23. 59	32. 0							
July 22		July 22		July 22		July 22		
0. 0	20. 32. 0	0. 0	·1402	0. 0	·03302	1. 0	62 ·8	64 ·8
0. 13	31. 30	0. 14	·1401	2. 12	·03357	8. 0	63 ·7	66 ·0
0. 59	33. 20	0. 37	·1404		***	21. 0	58 ·8	59 ·2
1. 13	32. 55	0. 59	·1415	3. 14	·03376			
	***	1. 14	·1412		***			
1. 43	33. 5	1. 20	·1406	4. 52	·03384			
	***	1. 25	·1409	5. 6	·03403			
2. 35	31. 35	1. 28	·1405	8. 21	·03440			
2. 49	32. 20	1. 36	·1408	10. 26	·03342			
3. 16	31. 40	1. 42	·1404	14. 54	·03228			
3. 39	30. 30	1. 53	·1407	15. 53	·03178			
3. 55	31. 0	2. 12	·1405	16. 55	·03157			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 22		July 22		July 22				
h m	° ′ ″	h m		h m		h m	°	°
4. 8	20. 29. 55	2. 18	·1409	17. 52	·03138			
4. 53	28. 40	2. 22	·1404	19. 12	·03158			
5. 10	29. 15	2. 26	·1409	20. 56	·03134			
6. 8	28. 30	2. 29	·1403	23. 59	·03176			
6. 14	29. 0	2. 41	·1407					
6. 36	28. 0	2. 43	·1404					
6. 40	28. 40	2. 50	·1411					
6. 57	27. 45	2. 55	·1408					
7. 27	26. 40	3. 0	·1413					
8. 30	27. 5	3. 14	·1408					
9. 42	26. 20	3. 22	·1409					
9. 53	25. 35	3. 29	·1405					
10. 6	26. 0	3. 44	·1405					
10. 22	25. 0	4. 9	·1413					
10. 45	25. 50	4. 35	·1406					
11. 24	25. 50	4. 57	·1407					
12. 21	24. 25	5. 12	·1412					
14. 40	24. 0	5. 54	·1411					
15. 28	22. 40	6. 12	·1415					
15. 52	21. 25	6. 20	·1411					
16. 23	21. 25	6. 37	·1414					
16. 51	23. 10	6. 55	·1410					
17. 6	22. 45	7. 29	·1414					
17. 11	22. 0	8. 26	·1409					
18. 12	21. 10	8. 56	·1408					
18. 39	21. 10	10. 15	·1411					
18. 45	21. 40		* * *					
19. 6	21. 0	11. 56	·1408					
19. 25	21. 20	12. 12	·1413					
19. 36	20. 55	12. 24	·1409					
19. 43	21. 30		* * *					
20. 15	21. 30	14. 15	·1415					
	* * *	14. 43	·1410					
21. 28	23. 50	15. 40	·1414					
21. 50	24. 10		* * *					
22. 43	26. 40	16. 56	·1408					
23. 41	28. 10	17. 36	·1411					
23. 59	29. 10	18. 57	·1407					
			* * *					
		21. 34	·1398					
		22. 42	·1398					
		22. 59	·1401					
		23. 26	·1404					
		23. 37	·1401					
		23. 59	·1410					
July 23		July 23		July 23		July 23		
0. 0	20. 29. 10	0. 0	·1410	0. 0	·03176	1. 0	61 ·6	63 ·[illegible]
0. 9	28. 25	0. 50	·1412	1. 12	·03183	3. 0	61 ·[illegible]	63 ·7
1. 6	29. 55	1. 6	·1408	3. 9	·03247	9. 0	61 ·0	62 ·4
1. 18	32. 0	1. 20	·1413	5. 0	·03296	21. 0	60 ·3	60 ·[illegible]
1. 29	31. 30	1. 39	·1410	7. 11	·03312			
1. 59	32. 20	2. 0	·1414	8. 24	·03320			
2. 56	32. 5	2. 28	·1412	8. 56	·03329			
3. 36	30. 30	3. 11	·1418	9. 57	·03272			
5. 0	28. 0	3. 22	·1414	10. 58	·03232			
5. 38	27. 40	3. 43	·1411	11. 12	·03237			
6. 51	28. 0	4. 11	·1414	11. 16	·03222			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
July 23		July 23		July 23				
h m	° ′ ″	h m		h m		h m	°	°
7. 25	20. 27. 20	5. 11	·1412	11. 42	·03227			
7. 41	27. 45	6. 8	·1420	13. 4	·03183			
8. 4	27. 0	6. 20	·1417	13. 26	·03191			
8. 19	27. 40	6. 35	·1419	15. 15	·03196			
8. 42	27. 20	6. 47	·1416	17. 13	·03184			
8. 56	28. 50	6. 57	·1419	17. 26	·03181			
9. 9	28. 50	7. 20	·1417	18. 55	·03206			
9. 13	28. 0	7. 29	·1423	20. 43	·03192			
9. 23	28. 30	7. 41	·1420	23. 59	·03239			
9. 26	27. 45	7. 57	·1424					
9. 36	28. 30	8. 12	·1425					
9. 56	27. 0	8. 20	·1427					
10. 8	23. 30	8. 27	·1414					
10. 30	15. 5	8. 56	·1427					
11. 11	23. 30	9. 17	·1420					
11. 26	20. 30	9. 35	·1425					
11. 41	20. 30	10. 10	·1410					
11. 54	21. 10	10. 17	·1408					
12. 3	20. 20	10. 28	·1419					
12. 14	20. 30	10. 35	·1416					
12. 26	23. 10	10. 50	·1424					
13. 13	19. 55	11. 6	·1411					
13. 42	22. 40	11. 16	·1419					
14. 4	23. 0	11. 25	·1402					
14. 18	21. 35	11. 35	·1407					
14. 41	21. 30	11. 46	·1415					
14. 51	20. 5		* * *					
15. 8	20. 15	12. 21	·1419					
15. 26	22. 20	12. 33	·1411					
15. 40	20. 10	12. 36	·1414					
15. 51	20. 30	12. 55	·1404					
15. 57	20. 0	12. 57	·1411					
16. 24	20. 30	13. 12	·1406					
16. 33	21. 30	13. 43	·1415					
17. 3	20. 40	13. 55	·1414					
17. 9	21. 0	14. 12	·1406					
17. 13	20. 15	14. 18	·1411					
17. 23	22. 5	14. 26	·1414					
18. 6	22. 5	14. 46	·1408					
18. 12	21. 10	14. 55	·1413					
18. 17	22. 20	15. 0	·1409					
18. 28	19. 40	15. 25	·1416					
18. 36	21. 30	15. 42	·1422					
19. 3	23. 40	15. 56	·1413					
19. 9	22. 45	16. 11	·1408					
19. 18	22. 0		* * *					
19. 38	22. 40	17. 13	·1401					
19. 43	23. 30	18. 12	·1404					
19. 53	23. 20	18. 29	·1399					
20. 4	23. 30	18. 43	·1402					
21. 7	27. 20	19. 3	·1398					
22. 14	26. 20	19. 15	·1392					
22. 28	26. 40	19. 56	·1387					
22. 40	26. 20	20. 33	·1391					
	* * *	21. 12	·1386					
23. 23	29. 0	21. 54	·1384					
23. 59	30. 20	22. 40	·1389					
		22. 51	·1395					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
h m	° ′ ″	July 23 h m		h m		h m	°	
		23. 20	·1397					
		23. 29	·1394					
		23. 59	·1399					
July 24		July 24		July 24		July 24		
0. 0	20. 30. 20	0. 0	·1399	0. 0	·03239	1. 0	62 ·0	63 ·9
0. 12	30. 5	0. 42	·1401	1. 26	·03277	3. 0	62 ·3	63 ·8
1. 7	30. 30	2. 14	·1407	4. 39	·03343	9. 0	62 ·6	64 ·0
1. 53	31. 20	2. 22	·1405	8. 59	·03357	21. 0	59 ·8	60 ·9
3. 28	28. 25	2. 54	·1407	10. 44	·03296	22. 0	60 ·5	61 ·2
3. 38	28. 40	3. 14	·1405	14. 13	·03237	23. 0	60 ·8	62 ·1
3. 49	28. 5	3. 42	·1408	17. 27	·03217			
4. 32	28. 10	3. 53	·1406	19. 13	·03228			
4. 51	27. 30	4. 11	·1408	21. 57	·03204			
8. 21	26. 50	4. 26	·1404	23. 59	·03245			
8. 44	25. 50	4. 45	·1403					
9. 28	27. 0	5. 26	·1407					
10. 56	26. 50	5. 41	·1404					
11. 11	26. 10	5. 56	·1404					
13. 26	26. 40	6. 25	·1409					
14. 20	25. 15	6. 41	·1404					
14. 30	25. 30	6. 55	·1411					
14. 51	24. 45	8. 54	·1405					
15. 6	25. 30	9. 10	·1407					
15. 20	25. 0	9. 26	·1402					
15. 41	25. 50	10. 42	·1408					
15. 58	24. 55	13. 23	·1409					
16. 11	25. 25	13. 27	·1407					
16. 45	24. 30	16. 40	·1410					
17. 40	23. 50	16. 53	·1407					
17. 59	23. 0	17. 36	·1408					
18. 23	23. 20	17. 54	·1406					
18. 30	22. 50	18. 7	·1407					
19. 3	22. 30	18. 30	·1404					
19. 56	24. 55	18. 45	·1401					
20. 7	24. 40	19. 14	·1406					
20. 23	25. 15	19. 55	·1402					
20. 38	25. 0	20. 41	·1398					
22. 21	27. 20	21. 10	·1402					
22. 43	28. 20	21. 47	·1395					
23. 8	28. 5	22. 25	·1399					
23. 59	29. 50	22. 45	·1396					
		23. 59	·1403					
July 25		July 25		July 25		July 25		
0. 0	20. 29. 50	0. 0	·1403	0. 0	·03245	0. 0	61 ·1	62 ·5
0. 20	30. 20	0. 55	·1407	3. 0	·03320	1. 0	61 ·7	63 ·2
2. 11	30. 30	2. 19	·1411	9. 6	·03346	2. 0	61 ·8	63 ·5
2. 41	30. 0	2. 42	·1407	10. 44	·03322	3. 0	62 ·0	64 ·0
2. 56	30. 5	3. 6	·1411	11. 22	·03298	9. 0	61 ·7	63 ·1
5. 28	27. 30	3. 41	·1405	14. 17	·03257	21. 0	61 ·5	62 ·[illegible]
6. 44	27. 50	3. 55	·1410	14. 26	·03264	22. 0	61 ·8	63 ·2
8. 4	26. 55	4. 26	·1407	15. 41	·03240	23. 0	62 ·0	63 ·7
8. 20	27. 25	5. 10	·1409	16. 48	·03182			
9. 40	27. 0	5. 23	·1407	17. 2	·03172			
9. 53	26. 25	6. 10	·1409	17. 41	·03168			
10. 27	26. 30	6. 29	·1407	18. 45	·03180			
10. 42	25. 30	6. 55	·1411	19. 22	·03198			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 25 h m	° ′ ″	July 25 h m		July 25 h m		h m	°	
11. 0	20. 28. 5	7. 12	·1408	21. 24	·03224			
11. 38	24. 20	7. 25	·1412	21. 56	·03224			
12. 0:	25. 25	8. 12	·1413	22. 20	·03236			
12. 47	23. 20	8. 42	·1409	23. 59	·03272			
13. 21	23. 20	8. 57	·1411					
14. 9	21. 50	9. 27	·1412					
14. 20	21. 50	9. 47	·1409					
14. 23	21. 0	10. 12	·1409					
14. 26	22. 40	10. 41	·1415					
14. 43	23. 50	10. 55	·1422					
14. 59	23. 10	11. 35	·1413					
15. 16	24. 35	12. 8	·1417					
15. 21	24. 25	12. 43	·1411					
15. 41	27. 0	14. 14	·1414					
15. 51	26. 30	14. 24	·1406					
16. 11	27. 10	14. 44	·1414					
16. 53	24. 15	14. 55	·1411					
17. 0	26. 25	15. 12	·1415					
17. 23	26. 0	15. 35	·1411					
17. 33	26. 40	15. 43	·1415					
17. 43	25. 50	15. 55	·1412					
17. 56	27. 45	16. 14	·1417					
18. 6	26. 25	16. 35	·1420					
18. 14	26. 10	16. 55	·1414					
18. 38	21. 20	17. 27	·1418					
18. 51	20. 0	17. 41	·1413					
19. 8	20. 15	17. 50	·1415					
19. 23	19. 0	18. 6	·1408					
19. 30	19. 40	18. 17	·1412					
19. 56	19. 10	18. 38	·1410					
20. 4	19. 35	18. 55	·1402					
20. 16	19. 0	19. 26	·1399					
20. 33	18. 50	20. 0	·1399					
21. 18	22. 0	20. 10	·1394					
21. 27	23. 0	20. 15	·1397					
21. 43	23. 0	20. 29	·1394					
21. 56	24. 0	21. 26	·1396					
22. 26	25. 0	21. 44	·1392					
23. 38	30. 20	21. 56	·1395					
23. 59	31. 25	22. 25	·1392					
		23. 59	·1392					
July 26		July 26		July 26		July 26		
0. 0	20. 31. 25	0. 0	·1392	0. 0	·03272	0. 0	62 ·3	64 ·1
0. 36	32. 55	1. 8	·1395	3. 14	·03342	1. 0	62 ·6	64 ·8
1. 21	31. 40	1. 23	·1390	5. 10	·03378	2. 0	62 ·8	65 ·0
1. 43	31. 55	1. 54	·1403	9. 12	·03416	3. 0	63 ·0	64 ·0
3. 3	29. 40	1. 58	·1400	10. 26	·03376	9. 0	63 ·3	65 ·8
3. 19	30. 10	2. 25	·1403	10. 54	·03346	21. 0	61 ·1	62 ·0
3. 33	29. 20	2. 34	·1406	17. 25	·03267			
5. 8	27. 30	2. 45	·1404	18. 58	·03296			
5. 21	27. 50	2. 56	·1407	21. 25	·03277			
5. 48	27. 0	3. 12	·1400	23. 59	·03300			
6. 10	27. 25	3. 26	·1406					
6. 38	26. 30	3. 43	·1401					
6. 44	26. 50	4. 12	·1400					
	***	4. 43	·1402					
8. 5	26. 0	5. 12	·1399					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 26		July 26						
h m	° ′ ″	h m		h m		h m	°	°
8. 43	20. 27. 5	5. 32	·1406					
8. 59	25. 30	5. 45	·1400					
9. 10	25. 40	6. 10	·1404					
9. 41	24. 20	6. 20	·1400					
9. 53	25. 0	6. 43	·1404					
10. 12	25. 0	6. 54	·1409					
10. 36	22. 5	6. 59	·1407					
10. 55	21. 20	7. 22	·1410					
11. 23	23. 35	7. 34	·1406					
11. 28	23. 25	7. 53	·1404					
11. 40	24. 55	8. 0	·1407					
11. 56	24. 20	9. 13	·1403					
12. 4	25. 0	9. 39	·1400					
12. 26	24. 0	10. 12	·1403					
12. 43	25. 0	10. 40	·1413					
13. 25	25. 0	10. 53	·1411					
13. 43	24. 20	10. 59	·1406					
13. 58	24. 45	11. 25	·1403					
14. 16	23. 30	11. 44	·1406					
14. 40	24. 25	12. 15	·1407					
14. 44	23. 55	12. 40	·1404					
15. 9	25. 0		***					
15. 30	24. 20	14. 26	·1401					
15. 40	24. 55	16. 53	·1410					
16. 0	24. 0	17. 19	·1406					
16. 11	24. 40	18. 16	·1401					
16. 23	24. 0	19. 10	·1408					
16. 38	24. 40	21. 21	·1398					
17. 15	23. 20	21. 46	·1391					
17. 25	23. 30	22. 41	·1389					
17. 37	22. 40	23. 7	·1392					
18. 7	22. 30	23. 20	·1391					
18. 14	23. 5	23. 43	·1395					
18. 24	21. 40	23. 59	·1395					
18. 27	22. 20							
18. 49	22. 30							
18. 56	21. 55							
19. 26	22. 40							
19. 53	21. 30							
20. 4	22. 10							
20. 46	22. 30							
22. 39	24. 30							
22. 59	26. 20							
23. 39	28. 25							
23. 59	29. 20							
July 27		July 27		July 27		July 27		
0. 0	20. 29. 20	0. 0	·1395	0. 0	·03300	1. 0	62 ·1	63 ·6
0. 58	30. 50	0. 44	·1397	3. 2	·03352	3. 0	62 ·9	64 ·0
1. 18	30. 20	1. 10	·1400	5. 32	·03377	9. 0	62 ·1	62 ·8
1. 26	30. 55	1. 24	·1399	9. 30	·03380	21. 0	62 ·2	63 ·4
2. 17	30. 0	1. 33	·1402	17. 11	·03272			
3. 41	29. 30	2. 18	·1400	20. 10	·03303			
4. 36	27. 40	3. 20	·1399	22. 14	·03316			
5. 23	27. 25	3. 26	·1402	23. 59	·03337			
5. 55	26. 30	3. 36	·1399					
7. 14	26. 20	4. 16	·1403					
7. 34	25. 40	4. 42	·1400					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 27		July 27						
h m	° ′ ″	h m		h m		h m	°	°
9. 26	20. 25. 35	5. 0	·1404					
9. 56	23. 30	5. 37	·1398					
10. 9	24. 25	6. 7	·1404					
10. 12	24. 0	6. 22	·1403					
10. 41	25. 20	6. 40	·1406					
11. 12	23. 0	6. 57	·1407					
11. 28	22. 40	7. 13	·1404					
11. 43	23. 35	7. 27	·1407					
12. 34	23. 30	7. 53	·1408					
13. 14	24. 40	8. 6	·1405					
13. 40	23. 55	8. 21	·1409					
15. 26	24. 5	8. 37	·1407					
15. 56:	23. 10	9. 29	·1411					
16. 13	23. 45	9. 43	·1409					
16. 41	23. 5	10. 6	·1419					
17. 11	23. 0	10. 13	·1412					
17. 40	23. 40	10. 40	·1416					
18. 3	22. 40	10. 59	·1415					
18. 14	23. 55	11. 20	·1409					
18. 40:	23. 0	11. 37	·1412					
19. 2	22. 50	11. 54	·1409					
19. 18	22. 25	12. 12	·1411					
19. 56	23. 0	12. 34	·1407					
20. 7	22. 40	13. 21	·1409					
22. 18	24. 0	13. 38	·1406					
22. 53	25. 20	14. 14	·1408					
23. 9	26. 5	14. 55	·1406					
23. 59	27. 40	15. 26	·1407					
		15. 55	·1405					
		16. 44	·1407					
		17. 26	·1402					
		18. 13	·1403					
		19. 25	·1397					
		20. 12	·1397					
		20. 41	·1394					
		21. 50	·1395					
		21. 59	·1392					
		23. 37	·1403					
		23. 59	·1404					
July 28		July 28		July 28		July 28		
0. 0	20. 27. 40	0. 0	·1404	0. 0	·03337	1. 0	63 ·2	65 ·1
1. 33	30. 0	0. 40	·1403	2. 33	·03383	3. 0	63 ·4	64 ·8
	***	1. 26	·1396	3. 46	·03381	9. 0	63 ·6	64 ·6
3. 8	29. 40	1. 41	·1399	6. 26	·03411	21. 0	62 ·6	64 ·0
4. 39	27. 40	2. 3	·1396	9. 12	·03422			
7. 26	25. 20	2. 12	·1398	11. 4	·03384			
7. 59	25. 30	2. 29	·1396	14. 56	·03358			
8. 56	23. 40	2. 44	·1401	21. 11	·03345			
9. 44	25. 0	3. 29	·1396	23. 24	·03312			
11. 19	24. 40	4. 35	·1397	23. 59	·03324			
12. 11	25. 20	5. 10	·1402					
12. 21	26. 25	5. 41	·1403					
12. 38	25. 40	5. 57	·1399					
13. 6	27. 5	6. 41	·1408					
13. 24	26. 0	7. 11	·1404					
14. 18	25. 5	7. 59	·1404					
14. 56	25. 5	8. 55	·1401					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July28		July 28						
h m	° ′ ″	h m		h m		h m	°	°
16. 33	20. 24. 0	9. 21	·1403					
17. 14	22. 55	9. 55	·1403					
18. 40	22. 5	10. 18	·1405					
19. 0	21. 35	10. 53	·1402					
20. 3	21. 30	12. 11	·1403					
21. 20	24. 5	13. 20	·1408					
23. 59	33. 50	13. 40	·1406					
		16. 57	·1406					
		18. 57	·1397					
		20. 22	·1389					
		21. 20	·1384					
		22. 19	·1385					
		22. 57	·1386					
		23. 59	·1396					
July29		July29		July 29		July 29		
0. 0	20. 33. 50	0. 0	·1396	0. 0	·03324	0. 15	63 ·6	64 ·7
0. 30	34. 5	0. 10	·1394	0. 53	·03336	6. 0	63 ·7	64 ·8
2. 25	32. 55	1. 41	·1405	2. 19	·03380	10. 0	59 ·6	62 ·0
4. 33	28. 15	2. 19	·1404	3. 55	·03407	14. 30	58 ·7	59 ·6
4. 44	28. 20	3. 8	·1407	6. 31	·03420	21. 0	59 ·7	60 ·5
5. 0	27. 25	3. 42	·1404	10. 12	·03319			
5. 56	26. 5	4. 38	·1407	14. 24	·03263			
6. 4	26. 20	4. 54	·1412	17. 43	·03203			
6. 41	25. 30	5. 31	·1408	19. 12	·03200			
7. 25	25. 40	6. 9	·1404	23. 14	·03156			
7. 37	24. 30	6. 22	·1406	23. 59	·03177			
7. 55	24. 30	10. 20	·1408					
8. 16	23. 40	11. 21	·1407					
8. 37	24. 55	13. 27	·1407					
8. 43	24. 0	14. 24	·1412					
8. 58	25. 30	14. 52	·1407					
9. 18	25. 20	15. 5	·1410					
9. 35	25. 40	15. 41	·1413					
10. 2	25. 5	16. 27	·1407					
11. 56	25. 55	16. 54	·1408					
13. 34	25. 30	17. 6	·1404					
13. 54	26. 0	18. 26	·1402					
	***	19. 26	·1398					
14. 38	25. 15	20. 13	·1392					
14. 56:	24. 0	21. 16	·1384					
15. 14	26. 0	22. 26	·1388					
15. 29	26. 50	23. 26	·1395					
16. 16	23. 30	23. 59	·1399					
16. 51	22. 40							
17. 11	22. 50							
17. 44	21. 55							
18. 11	22. 0							
18. 58	20. 30							
19. 28	20. 35							
20. 29	22. 45							
21. 43	27. 15							
22. 24	28. 40							
23. 39	32. 10							
23. 53	32. 10							
23. 59	32. 50							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July30		July30		July30		July 30		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 32. 50	0. 0	·1399	0. 0	·03177	1. 0	61 ·3	62 ·6
0. 41	33. 25	1. 24	·1401	5. 14	·03300	3. 0	61 ·6	63 ·0
1. 27	32. 40	2. 12	·1404	9. 38	·03304	9. 0	62 ·0	63 ·5
2. 27	30. 45	3. 10	·1409	12. 26	·03218	21. 0	56 ·9	58 ·6
2. 37	30. 50	4. 12	·1411	16. 36	·03163			
3. 6	30. 0	4. 30	·1406	17. 25	·03148			
4. 14	27. 0	4. 43	·1408	19. 4	·03176			
5. 26:	25. 45	4. 59	·1407	21. 24	·03116			
6. 41	26. 0	5. 26	·1406	23. 21	·03075			
7. 41	26. 55	5. 46	·1409	23. 59	·03057			
8. 9	26. 30	6. 11	·1406					
8. 19	26. 55	6. 45	·1411					
9. 23	26. 5	8. 10	·1410					
9. 37	26. 45	8. 21	·1411					
10. 13	26. 30	8. 35	·1409					
11. 14	25. 35	9. 12	·1408					
11. 36	26. 0	9. 21	·1409					
12. 24	24. 20	9. 36	·1407					
13. 7	24. 45	11. 44	·1405					
13. 26	25. 20	11. 57	·1409					
13. 56	24. 30	12. 31	·1405					
14. 11:	25. 10	13. 55	·1408					
14. 26	24. 20	16. 27	·1410					
14. 43	25. 0	17. 27	·1407					
16. 5	24. 10	17. 45	·1408					
16. 34	23. 30	18. 23	·1405					
16. 40	23. 30	18. 55	·1405					
17. 25	22. 30	21. 24	·1397					
17. 28	23. 0	23. 42	·1409					
17. 36	22. 35	23. 59	·1406					
	***							
18. 43	23. 0							
19. 8	22. 10							
19. 39	21. 55							
19. 51	22. 10							
20. 18	22. 20							
21. 36	25. 0							
21. 41	25. 50							
21. 50	25. 45							
23. 59	30. 20							
July31		July 31		July 31		July3		
0. 0	20. 30. 20	0. 0	·1406	0. 0	·03057	1. 0	58 ·7	60 ·4
1. 22	32. 50	0. 55	·1411	1. 23	·03076	3. 0	58 ·8	60 ·6
1. 28	32. 30	1. 40	·1413	2. 15	·03122	9. 0	59 ·1	60 ·4
1. 43	32. 40	2. 40	·1422	5. 40	·03174	21. 0	58 ·9	59 ·0
1. 52	32. 5	3. 19	·1415	9. 0	·03146	22. 0	58 ·3	59 ·0
2. 21	32. 5	3. 50	·1415	9. 40	·03126	23. 0	58 ·6	59 ·5
2. 56	30. 55	3. 56	·1418	11. 24	·03116			
3. 11	30. 40	4. 26	·1414	12. 43	·03096			
3. 43	28. 10	4. 42	·1418	13. 28	·03074			
4. 59	26. 20	4. 55	·1417	16. 19	·03093			
5. 17	26. 55	5. 22	·1427	17. 26	·03062			
5. 28	26. 10	5. 36	·1423	19. 46	·03092			
5. 42	26. 30	5. 43	·1427	21. 14	·03076			
6. 6	26. 0	6. 12	·1417	23. 38	·03076			
6. 40	26. 50	6. 34	·1420	23. 59	·03086			
7. 28	26. 0	6. 43	·1417					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 31		July 31						
h m	° ′ ″	h m		h m		h m	°	°
7. 58	20. 26. 55	7. 11	·1421					
8. 8	24. 0	7. 23	·1419					
8. 25	21. 30	7. 51	·1428					
8. 58	14. 55	8. 22	·1423					
9. 28	20. 40	8. 33	·1419					
9. 43	18. 40	8. 40	·1422					
10. 11	20. 40	8. 44	·1420					
10. 26	18. 40	9. 10	·1428					
10. 41	17. 25	9. 21	·1426					
10. 54	17. 55	9. 42	·1404					
11. 9	19. 25	9. 56	·1410					
11. 29	19. 10	10. 12	·1404					
11. 43	18. 0	10. 55	·1404					
11. 56	17. 20	11. 6	·1406					
12. 9	19. 35	11. 14	·1403					
12. 26	22. 30	11. 42	·1411					
12. 33	23. 55	12. 22	·1401					
12. 43	23. 30	12. 57	·1416					
13. 31	16. 50	13. 26	·1409					
13. 37	17. 10	13. 30	·1411					
13. 46	16. 0	13. 45	·1408					
14. 33	17. 40	14. 30	·1410					
14. 58	19. 15	14. 42	·1408					
15. 6	19. 25	14. 59	·1414					
15. 18	21. 45	15. 12	·1409					
15. 39	22. 0	15. 26	·1413					
15. 42	21. 15	15. 45	·1408					
15. 55	22. 0	16. 12	·1405					
16. 10	26. 20	16. 40	·1408					
16. 14	26. 25	17. 0	·1414					
16. 41	30. 5	17. 33	·1407					
16. 46	29. 55	17. 42	·1407					
16. 55	29. 55	18. 12	·1414					
17. 9	31. 15	18. 42	·1404					
17. 36	29. 0	19. 0	·1406					
17. 39	29. 10	19. 27	·1398					
17. 53	27. 55	19. 55	·1388					
17. 58	28. 10	20. 27	·1380					
18. 8	27. 20	20. 55	·1366					
18. 11	27. 40	21. 12	·1366					
18. 19	26. 15	21. 20	·1370					
18. 25	26. 25	21. 41	·1374					
18. 34	25. 10	21. 54	·1379					
18. 40	25. 30	22. 20	·1384					
18. 44	25. 10	22. 40	·1382					
18. 56	26. 30	22. 54	·1386					
19. 4	26. 40	23. 12	·1384					
19. 14	25. 45	23. 53	·1399					
19. 39	28. 0	23. 59	·1391					
19. 59	26. 55							
20. 17	28. 10							
20. 53	29. 20							
21. 5	30. 50							
21. 26	30. 20							
22. 19	34. 30							
	***							
23. 7	32. 30							
23. 11	31. 50							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
July 31								
h m	° ′ ″	h m		h m		h m	°	°
23. 26	20. 31. 0							
23. 59	32. 5							
Aug. 1		Aug. 1		Aug. 1		Aug. 1		
0. 0	20. 32. 5	0. 0	·1391	0. 0	·03086	0. 0	59 ·6	60 ·2
0. 6	32. 20	0. 11	·1395	0. 42	·03104	1. 0	59 ·6	60 ·8
0. 16	31. 40	0. 25	·1393	2. 26	·03158	2. 0	59 ·6	61 ·5
0. 29	32. 25	0. 44	·1401		(†)	3. 0	60 ·1	62 ·0
0. 53	32. 45	1. 5	·1399	3. 0	·03194*	9. 0	59 ·6	61 ·0
2. 4	34. 10	1. 11	·1401	9. 0	·03239*	21. 0	60 ·8	62 ·0
2. 53:	33. 10	1. 13	·1392	9. 30	·03218	22. 0	60 ·7	62 ·0
3. 24	34. 5	1. 25	·1396	11. 25	·03170	23. 0	60 ·9	62 ·0
3. 34	35. 0	1. 41	·1391	12. 27	·03158			
3. 44	34. 20	2. 12	·1389	17. 28	·03143			
3. 54	33. 25	2. 42	·1401	19. 19	·03173			
4. 8	33. 55	2. 52	·1399	21. 20	·03170			
4. 13	34. 40	3. 11	·1405	23. 4	·03164			
4. 28	33. 45	3. 21	·1400	23. 59	·03180			
4. 36	34. 0	3. 42	·1409					
4. 56	31. 30	3. 56	·1386					
5. 9	31. 10	4. 40	·1424					
5. 25	29. 5	5. 10	·1409					
5. 41	27. 50	5. 12	·1410					
5. 46	28. 0	5. 30	·1405					
6. 3	24. 40	5. 46	·1404					
6. 11	25. 20	5. 55	·1411					
6. 26	25. 0	6. 12	·1406					
6. 42	25. 50	6. 42	·1422					
6. 53	27. 5	6. 55	·1419					
7. 11	26. 10	7. 0	·1421					
7. 36	27. 0	7. 11	·1418					
7. 55	26. 5		***					
8. 11	27. 10	7. 59	·1412					
8. 17	26. 35	8. 12	·1415					
8. 28	26. 0	8. 20	·1419					
8. 41	26. 40	8. 56	·1406					
11. 41	23. 35	9. 24	·1409					
15. 28	22. 45	10. 25	·1408					
16. 44	21. 15	13. 54	·1408					
18. 13	21. 10	16. 30	·1411					
18. 20	21. 55	17. 26	·1405					
18. 30	21. 25	18. 11	·1403					
18. 56	21. 30	19. 27	·1396					
19. 14	22. 15	19. 43	·1399					
19. 34	21. 40	20. 6	·1397					
19. 44	22. 25	21. 56	·1393					
21. 23	23. 45	22. 12	·1395					
21. 39	25. 0	22. 26	·1390					
22. 13	26. 0	22. 57	·1396					
22. 25	25. 40	23. 12	·1394					
22. 53	27. 25	23. 59	·1403					
23. 5	27. 0							
23. 59	30. 0							
Aug. 2		Aug. 2		Aug. 2		Aug. 2		
0. 0	20. 30. 0	0. 0	·1403	0. 0	·03180	0. 0	61 ·6	62 ·8
0. 24	30. 20	1. 35	·1403	3. 59	·03282	1. 0	61 ·6	63 ·1
1. 34	29. 0	1. 48	.1407	8. 59	·03325	2. 0	62 ·0	63 ·9

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 2		Aug. 2		Aug. 2		Aug. 2		
h m	° ′ ″	h m		h m		h m	°	°
1.41	20.29.30	2.40	·1405	11.28	·03323	3. 0	62·6	63·9
2.20	29.30	2.52	·1407	14.12	·03280	9. 0	62·6	64·0
2.30	28.45	3. 9	·1406	15.42	·03255	21. 0	61·5	62·8
5. 3	26.30	3.39	·1412	17.22	·03243	22. 0	61·5	62·9
5.21	27. 0	5.55	·1408	18.56	·03255	23. 0	61·4	63·0
5.43	26.20	6.12	·1411	23.10	·03246			
6.11	26.55	6.25	·1409	23.59	·03254			
6.36	26.30	6.57	·1414					
7.34	27. 0	7.38	·1413					
8. 4	25.30	7.57	·1405					
8.11	25.55	8.22	·1404					
8.17	25.10	8.56	·1406					
9.23	25.45	9.12	·1405					
10. 9	25.35	15.54	·1407					
10.38	25.40	16.57	·1404					
10.45	25.25	19.26	·1396					
11.20	24.40	19.43	·1398					
11.40	25.30	21.22	·1389					
12. 9	23.30	23.25	·1392					
12.24	23.55	23.59	·1399					
13.23	23.25							
13.33	24. 0							
13.59	24. 0							
14.26	25.10							
15.36	22.40							
17.25	21.50							
17.40	21.20							
18.40	21.20							
19.33	22. 5							
21.25	26.40							
21.39	26.40							
22.12	28. 0							
23.17	29.50							
23.40	29.50							
23.59	30.50							
Aug. 3		Aug. 3		Aug. 3		Aug. 3		
0. 0	20.30.50	0. 0	·1399	0. 0	·03254	0. 0	61·5	63·2
0.39	31.20	0.20	·1401	0.56	·03273	1. 0	62·3	63·4
1. 8	31.20	0.38	·1405	3.12	·03335	2. 0	62·6	64·6
1.43	29.55	0.51	·1403	4.34	·03346	3. 0	62·5	64·0
2.14	29.30	1.44	·1403	5. 6	·03337	9. 0	63·2	65·0
3.18	27.30	1.54	·1406	9.39	·03364	12. 0	59·6	62·0
3.43	27.10	2.10	·1404	10.41	·03353	21. 0	59·4	61·6
4.13	26. 5	2.21	·1406	11.58	·03316			
4.58	25.30	2.43	·1405	14.49	·03232			
6.29	25.25	2.57	·1409	17.41	·03183			
7.33	26.20	3.34	·1404	18.54	·03193			
8.43	26. 5	3.43	·1406	20.41	·03172			
11. 3	25.40	4.10	·1404	23.14	·03164			
11.17	24.50	4.26	·1405	23.59	·03177			
13. 3	24.25	4.50	·1402					
13.26	23.40	4.59	·1405					
13.51	24.30	5.12	·1403					
14. 0	24. 0	5.27	·1410					
14. 9	22.55	5.43	·1407					
14.39	23.40	6.11	·1415					
14.58	23. 5	6.26	·1416					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 3		Aug. 3						
h m	° ′ ″	h m		h m		h m	°	°
15.31	20.24. 0	7.22	·1403					
16.53	21. 0	7.36	·1408					
19.26	21.40	8. 6	·1406					
20.26	23.10	8.42	·1408					
21.38	24.40	8.57	·1411					
21.59	24.40	9.11	·1410					
23.44	29.55	9.20	·1411					
23.59	29.55	9.36	·1406					
		12.43	·1406					
		13.45	·1410					
		17. 7	·1408					
		17.20	·1405					
		18.42	·1404					
		20.14	·1400					
		21.27	·1400					
		22. 6	·1390					
		23.10	·1396					
		23.26	·1395					
		23.54	·1398					
		23.59	·1397					
Aug. 4		Aug. 4		Aug. 4		Aug. 4		
0. 0	20.29.55	0. 0	·1397	0. 0	·03177	1. 0	61·0	63·4
0.11	30. 5	0.41	·1398	0.25	·03188	3. 0	61·5	63·0
0.19	29.35	1.12	·1397	3. 6	·03243	9. 0	61·8	63·4
0.55	30. 0	1.20	·1400	6. 4	·03273	9.40	58·9	61·0
2.29	29.30	3.23	·1403	9.11	·03284	21.10	59·2	60·2
5.11	25.10	3.57	·1400	10.19	·03235			
7.30	25. 0	5.14	·1400	12. 6	·03184			
8. 6	24.30	6.22	·1405	17.24	·03103			
9.18	25.35	6.45	·1407	19.10	·03116			
12.53	24.55	8.53	·1407	20.24	·03107			
19.44	21.10	11.20	·1410	22.54	·03092			
20.54	22.10	17.17	·1413	23.59	·03111			
20.57	20.30	18.52	·1411					
21.56	23.10	19.58	·1405					
22. 6	24.20	20.45	·1404					
23.32	28.50	21. 1	·1410					
23.54	31. 0	21.54	·1410					
23.59	30.55	21.59	·1413					
		22.25	·1415					
		22.54	·1423					
		23.11	·1421					
		23.24	·1417					
		23.44	·1424					
		23.59	·1418					
Aug. 5		Aug. 5		Aug. 5		Aug. 5		
0. 0	20.30.55	0. 0	·1418	0. 0	·03111	0.20	60·5	62·1
0.11	30.50	0.35	·1411	1.59	·03163	9. 0	61·1	62·8
0.36	33. 0	0.42	·1403	4. 8	·03196	21. 0	59·3	60·2
0.41	31.30	1.12	·1406	6.11	·03207	22. 0	59·8	60·9
1.13	32.20	1.24	·1416	9.24	·03225	23. 0	59·8	61·2
1.26	33.30	1.41	·1413	10.14	·03221			
2.16	33.20	2. 9	·1414	11. 6	·03200			
3. 9	32.30	2.20	·1417	11.58	·03137			
4. 4	29.40	2.57	·1413	12.51	·03128			
5.16	27. 0	3.24	·1405	13.40	·03107			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 5		Aug. 5		Aug. 5				
h m	° ′ ″	h m		h m		h m	°	°
7. 43	20. 27. 5	3. 54	·1403	15. 42	·03104			
8. 13	26. 25	4. 0	·1407	17. 21	·03098			
8. 39	26. 45	4. 20	·1406	19. 13	·03128			
8. 52	24. 5	4. 43	·1413	20. 54	·03105			
9. 6	22. 35	4. 55	·1410	23. 40	·03129			
9. 23	22. 55	5. 20	·1411	23. 59	·03138			
9. 39	22. 20	5. 36	·1417					
10. 4	24. 10	5. 48	·1416					
10. 39	23. 30	6. 11	·1416					
10. 54	25. 30	6. 25	·1420					
11. 8	29. 10	6. 44	·1415					
11. 27	29. 10	7. 20	·1419					
12. 6	20. 55	7. 43	·1416					
12. 36	18. 50	7. 59	·1418					
12. 42	18. 50	8. 22	·1414					
13. 11	14. 45	8. 36	·1418					
13. 33	12. 55	8. 52	·1416					
14. 7	17. 10	9. 20	·1418					
14. 36	18. 5	9. 42	·1410					
14. 55	17. 25	10. 12	·1407					
15. 16	17. 25	10. 20	·1414					
15. 42	19. 10	10. 42	·1409					
16. 4	18. 55	11. 7	·1408					
16. 13	17. 30	11. 35	·1422					
16. 50	16. 0	12. 12	·1417					
17. 9	17. 30	12. 49	·1411					
17. 14	16. 25	13. 12	·1421					
17. 57	20. 20	13. 40	·1417					
18. 21	20. 10	13. 45	·1413					
18. 30	20. 55	14. 22	·1407					
18. 38	20. 25	14. 43	·1411					
19. 18	22. 50	15. 35	·1404					
19. 42	22. 30	16. 6	·1410					
19. 56	21. 10	16. 57	·1409					
19. 58	22. 0	18. 24	·1399					
20. 16	23. 15	18. 53	·1397					
20. 36	23. 10	19. 12	·1400					
21. 24	25. 30	19. 36	·1396					
21. 58	25. 25		* * *					
22. 56	27. 30	21. 25	·1393					
23. 25	29. 30	22. 45	·1400					
23. 56	29. 50	23. 8	·1404					
23. 59	30. 5	23. 29	·1404					
		23. 59	·1405					
Aug. 6		Aug. 6		Aug. 6		Aug. 6		
0. 0	20. 30. 5	0. 0	·1405	0. 0	·03138	0. 0	60·3	62·5
0. 58	30. 55	0. 10	·1410	2. 54	·03192	1. 0	60·9	62·9
1. 6	31. 30	0. 27	·1407	6. 9	·03156	2. 0	60·7	62·9
1. 25	31. 35	0. 38	·1415	7. 41	·03149	3. 0	60·3	61·0
1. 37	30. 25	0. 50	·1415	7. 56	·03160	9. 0	59·7	60·0
2. 14	29. 30	1. 8	·1422	10. 12	·03156	21. 0	60·4	62·0
2. 23	29. 45	1. 29	·1412	14. 41	·03151	22. 0	60·6	62·0
2. 31	28. 30	1. 53	·1416	18. 13	·03177	23. 0	60·5	62·0
2. 39	29. 0	2. 12	·1413	23. 59	·03176			
	* * *	2. 33	·1419					
3. 28	27. 10	2. 43	·1423					
	* * *	3. 11	·1422					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 6		Aug. 6						
h m	° ′ ″	h m		h m		h m	°	°
4. 43	20. 28. 0	3. 25	·1413					
5. 7	25. 15	3. 51	·1416					
	* * *	4. 12	·1429					
6. 55:	25. 30	4. 25	·1423					
7. 40	19. 30	4. 42	·1425					
8. 7	23. 5	5. 22	·1408					
8. 11	21. 30	5. 55	·1413					
	* * *	6. 25	·1425					
9. 10	25. 10	6. 59	·1424					
9. 34	25. 0	7. 25	·1410					
9. 51	26. 0	7. 55	·1417					
10. 18	24. 50	8. 12	·1411					
	* * *	8. 15	·1416					
12. 43	24. 50	8. 25	·1413					
13. 6	26. 5	8. 56	·1416					
	* * *	9. 21	·1413					
15. 9	22. 0	9. 40	·1418					
16. 11	23. 10	9. 55	·1413					
16. 45	21. 55	10. 55	·1416					
17. 44	21. 0	11. 54	·1414					
19. 17	20. 20	12. 24	·1411					
22. 0	23. 30	12. 45	·1412					
23. 41	27. 55	13. 6	·1419					
23. 59	28. 35	13. 25	·1416					
		13. 35	·1417					
		13. 50	·1412					
		15. 5	·1410					
		15. 54	·1405					
		16. 41	·1408					
		19. 23	·1395					
		19. 45	·1396					
		20. 27	·1389					
		23. 4	·1391					
		23. 40	·1395					
		23. 59	·1398					
Aug. 7		Aug. 7		Aug. 7		Aug. 7		
0. 0	20. 28. 35	0. 0	·1398	0. 0	·03176	0. 0	60·9	62·5
0. 27	29. 0	0. 25	·1400	2. 41	·03224	1. 0	61·6	63·2
0. 44	29. 5	0. 41	·1399	6. 47	·03269	2. 0	61·6	63·0
1. 13	30. 25	1. 10	·1404	7. 58	·03273	3. 0	61·6	63·4
1. 40	29. 55	1. 36	·1398	8. 24	·03282	9. 0	58·8	61·0
2. 11	29. 50	2. 25	·1408	10. 44	·03192	14. 0	55·4	58·0
3. 41	27. 10	2. 54	·1404	15. 4	·03100	21. 0	59·1	61·0
4. 11	27. 5	3. 26	·1404	17. 10	·03137	22. 0	59·8	61·3
4. 19	26. 30	3. 43	·1399	18. 53	·03155	23. 0	59·7	61·2
4. 47	25. 50	4. 10	·1404	20. 28	·03105			
7. 11	25. 40	4. 22	·1403	21. 3	·03097			
7. 39	24. 20	4. 41	·1406	23. 59	·03122			
8. 3	20. 0	5. 5	·1405					
8. 11	19. 20	5. 33	·1398					
8. 56	24. 25	5. 58	·1403					
9. 50	25. 5	6. 47	·1411					
11. 26	23. 40	6. 56	·1408					
11. 41	24. 35	7. 19	·1407					
11. 53	23. 25	7. 33	·1409					
12. 44	24. 10	7. 56	·1401					
13. 4	23. 25	8. 12	·1409					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 7		Aug. 7						
h m	° ′ ″	h m		h m		h m	°	°
13. 35	20. 24. 0	12. 28	·1416					
16. 28	23. 0	14. 33	·1413					
19. 40	21. 0	17. 47	·1409					
23. 11	27. 30	18. 53	·1407					
23. 51	30. 0	21. 12	·1401					
23. 59	30. 10	22. 27	·1405					
		23. 6	·1409					
		23. 12	·1408					
		23. 29	·1410					
		23. 44	·1415					
		23. 59	·1411					
Aug. 8		Aug. 8		Aug. 8		Aug. 8		
0. 0	20. 30. 10	0. 0	·1411	0. 0	·03122	0. 0	60·4	62·0
0. 52	30. 50	0. 45	·1413	0. 42	·03140	1. 0	60·8	62·2
1. 9	32. 10	0. 55	·1417	3. 13	·03203	2. 0	61·2	62·6
2. 11	31. 35	1. 11	·1418	9. 0	·03224	3. 0	61·4	63·1
2. 33	30. 20	1. 24	·1412	14. 58	·03200	9. 0	61·3	63·0
3. 56	28. 10	2. 43	·1416	21. 15	·03146	21. 0	60·5	61·9
4. 28	26. 40	3. 15	·1413	23. 59	·03177	22. 0	60·5	62·0
6. 23	25. 25	3. 56	·1412			23. 30	60·8	62·2
7. 43	26. 5	4. 46	·1405					
8. 43	25. 25	5. 11	·1413					
9. 44	25. 10	5. 22	·1409					
9. 58	23. 40	5. 41	·1408					
10. 9	24. 5	5. 54	·1412					
10. 27	22. 20	6. 57	·1408					
11. 13	23. 30	7. 12	·1413					
11. 41	25. 10	7. 26	·1411					
14. 9	24. 40	7. 45	·1414					
15. 53	23. 30	9. 14	·1411					
16. 11	22. 40	9. 43	·1412					
16. 24	23. 0	9. 55	·1415					
17. 11	22. 30	10. 13	·1412					
17. 32	22. 35	10. 26	·1415					
18. 9	21. 55	10. 45	·1410					
18. 24	22. 35	10. 56	·1412					
18. 42	22. 25	11. 26	·1408					
18. 53	23. 5	11. 56	·1411					
19. 43	22. 0	12. 51	·1409					
19. 53	22. 15	13. 55	·1410					
20. 8	21. 40	16. 8	·1408					
21. 3	22. 55	17. 43	·1404					
21. 39:	22. 30	19. 24	·1398					
22. 24	24. 5	21. 23	·1394					
23. 42	29. 20	22. 11	·1399					
23. 59	30. 0	22. 21	·1397					
		23. 40	·1407					
		23. 59	·1409					
Aug. 9		Aug. 9		Aug. 9		Aug. 9		
0. 0	20. 30. 0	0. 0	·1409	0. 0	·03177	0. 0	61·4	63·3
0. 10	30. 25	0. 24	·1409	0. 24	·03160	1. 0	61·7	64·1
0. 56	31. 30	0. 40	·1412	2. 50	·03220	3. 0	61·7	64·0
2. 4	33. 5	0. 47	·1409	2. 56	·03217	9. 0	61·0	62·9
2. 48	32. 20	1. 24	·1417	3. 54	·03252	13. 0	57·8	58·7
2. 56	21. 25	1. 41	·1412	5. 34	·03262	21. 0	59·6	61·4
3. 25	32. 10	1. 49	·1415	7. 32	·03252	22. 0	60·0	61·6

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V. F. Magnet.
Aug. 9		Aug. 9		Aug. 9		Aug. 9		
h m	° ′ ″	h m		h m		h m	°	°
3. 43	20. 30. 20	1. 57	·1412	9. 19	·03257	23. 0	60·2	61·8
3. 55	31. 0	2. 11	·1416	10. 16	·03227			
4. 11	28. 30	2. 24	·1409	10. 20	·03216			
4. 24	29. 40	2. 32	·1410	10. 44	·03221			
	***	2. 40	·1407	10. 59	·03203			
5. 10	29. 40	2. 52	·1409	11. 23	·03200			
5. 33	28. 0	2. 57	·1400	11. 29	·03187			
7. 11	27. 45	3. 14	·1417	11. 40	·03200			
7. 40:	27. 0	3. 24	·1425	12. 39	·03163			
7. 56	27. 30	3. 39	·1421	13. 4	·03160			
8. 39	27. 0	3. 56	·1418	14. 41	·03065			
9. 4	26. 0	4. 12	·1408	14. 45	·03067			
9. 26	26. 0	4. 25	·1414	15. 12	·03057			
9. 33	26. 20	4. 27	·1412	15. 40	·03060			
9. 42	25. 35	4. 39	·1415	15. 44	·03056			
10. 34	24. 0	4. 51	·1410	16. 55	·03077			
10. 55	25. 10	5. 0	·1401	17. 41	·03060			
11. 13	23. 0	5. 13	·1396	18. 41	·03081			
11. 23	23. 0	5. 24	·1397	19. 11	·03076			
11. 26	21. 55	5. 27	·1394	19. 20	·03087			
11. 56	23. 40	5. 40	·1398	19. 29	·03076			
12. 48	22. 40	5. 54	·1405	19. 56	·03080			
12. 58	24. 10	6. 11	·1403	20. 11	·03095			
13. 13	24. 10	6. 43	·1411	23. 59	·03123			
13. 22	26. 25	6. 55	·1409					
13. 33	26. 20	7. 11	·1417					
13. 42	23. 40	7. 21	·1417					
13. 58	24. 5	7. 41	·1411					
14. 26	21. 25	7. 51	·1417					
14. 36	22. 10	7. 57	·1414					
14. 40	20. 10	8. 12	·1418					
14. 46	20. 40	9. 11	·1417					
14. 56	19. 30	9. 19	·1419					
15. 11	16. 10		***					
15. 23	14. 55	10. 15	·1421					
15. 33	14. 45	10. 25	·1411					
15. 41	15. 20	10. 41	·1418					
15. 47	13. 10	10. 50	·1428					
15. 56	11. 55	11. 12	·1416					
16. 2	12. 30	11. 25	·1418					
16. 17	13. 30	11. 33	·1412					
16. 44	20. 55	11. 42	·1417					
16. 56	20. 55	11. 49	·1413					
17. 0	22. 10	12. 26	·1419					
	***	12. 41	·1416					
17. 13	22. 50	12. 45	·1420					
17. 23	21. 25	13. 12	·1418					
17. 30	21. 10	13. 36	·1430					
17. 41	19. 10	13. 57	·1422					
17. 55	18. 30	14. 20	·1431					
18. 11	20. 20	14. 27	·1426					
18. 23	19. 45	14. 35	·1428					
18. 54	20. 20	14. 43	·1421					
19. 6	17. 55	15. 14	·1423					
19. 12	21. 30	15. 24	·1420					
19. 15	20. 0	15. 41	·1423					
19. 16	22. 20	15. 50	·1417					
19. 25	22. 0	16. 9	·1420					

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Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 9		Aug. 9						
h m	° ′ ″	h m		h m		h m	°	°
19. 27	20. 19. 30	16. 25	·1413					
	***	16. 29	·1415					
19. 41	21. 40	16. 41	·1410					
19. 53	19. 45	16. 53	·1409					
19. 57	19. 45	16. 58	·1417					
20. 1	22. 0	17. 13	·1421					
20. 9	23. 40	17. 25	·1419					
20. 17	22. 40	17. 41	·1412					
20. 26	24. 40	18. 12	·1403					
20. 42	25. 45	18. 54	·1403					
20. 53	24. 30	19. 5	·1401					
21. 51	27. 50	19. 16	·1407					
22. 13	27. 5	19. 27	·1400					
22. 24	27. 20	19. 54	·1398					
22. 32	27. 5	19. 58	·1399					
23. 29	29. 55	20. 21	·1388					
23. 47	29. 55	20. 41	·1391					
23. 59	31. 20	20. 48	·1387					
		21. 12	·1390					
		21. 25	·1382					
		22. 12	·1377					
		22. 35	·1380					
		22. 54	·1385					
		23. 42	·1390					
		23. 59	·1395					
Aug. 10		Aug. 10		Aug. 10		Aug. 10		
0. 0	20. 31. 20	0. 0	·1395	0. 0	·03123	0. 0	60 ·4	62 ·0
0. 29	31. 30	0. 24	·1396	2. 12	·03184	1. 0	60 ·7	62 ·6
0. 56	32. 40	0. 53	·1401	3. 5	·03207	3. 0	61 ·3	63 ·2
1. 41	32. 20	1. 13	·1399	5. 12	·03217	9. 0	59 ·8	62 ·1
1. 54	33. 25	1. 40	·1402	5. 34	·03208	10. 0	58 ·7	60 ·1
	***	1. 56	·1401	8. 56	·03216	11. 0	57 ·9	59 ·0
3. 3	29. 20	2. 0	·1397	9. 55	·03180	21. 0	59 ·1	60 ·0
3. 13	29. 30	2. 11	·1395	10. 35	·03132	22. 0	59 ·3	60 ·5
	***	2. 21	·1396	12. 30	·03111	23. 0	59 ·4	60 ·5
4. 9	27. 25	2. 40	·1404	16. 45	·03097			
4. 26	27. 25	2. 50	·1402	17. 59	·03083			
5. 7	26. 0	2. 57	·1406	19. 12	·03086			
5. 22	26. 20	3. 20	·1403	20. 27	·03066			
5. 34	25. 50	3. 37	·1400	23. 21	·03086			
6. 14	26. 0	3. 55	·1403	23. 59	·03103			
6. 41	25. 20	4. 3	·1401					
6. 56	25. 50	4. 26	·1404					
7. 13	25. 0	4. 41	·1407					
7. 33	25. 25	4. 55	·1404					
9. 4	24. 55	5. 12	·1404					
9. 23	23. 45	5. 27	·1409					
9. 29	24. 5	5. 42	·1406					
9. 41	23. 50	6. 3	·1409					
10. 6	28. 10	6. 14	·1406					
10. 13	27. 40	6. 29	·1407					
10. 41:	21. 10	6. 43	·1405					
10. 58	20. 35	7. 3	·1405					
11. 12	22. 20	7. 12	·1408					
11. 38	22. 45	8. 42	·1404					
12. 0	22. 30	9. 18	·1408					
12. 25	22. 25	9. 42	·1407					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 10		Aug. 10						
h m	° ′ ″	h m		h m		h m	°	°
12. 41	20. 20. 20	9. 56	·1414					
13. 33	24. 20	10. 11	·1421					
13. 47	23. 40	10. 36	·1408					
14. 3	24. 15	11. 9	·1416					
14. 43	23. 20	11. 57	·1411					
14. 54	24. 10	12. 52	·1406					
15. 6	23. 30	13. 45	·1406					
15. 11	23. 50	13. 57	·1410					
16. 26	21. 30	14. 22	·1409					
16. 51	22. 50	15. 41	·1413					
	***	16. 26	·1409					
17. 9	20. 0	16. 44	·1411					
17. 21	21. 40	16. 54	·1416					
17. 33	19. 50	17. 10	·1413					
17. 56	19. 20	17. 20	·1416					
18. 3	20. 20	18. 0	·1411					
18. 11	19. 55	18. 22	·1412					
18. 25	20. 0	18. 44	·1405					
18. 28	19. 15	18. 54	·1410					
18. 37	20. 30	19. 25	·1403					
18. 41	19. 30	19. 42	·1405					
	***	20. 5	·1398					
18. 59	19. 30	20. 12	·1403					
19. 12	22. 0	20. 23	·1396					
19. 25	20. 0	20. 43	·1397					
19. 37	21. 20	20. 54	·1392					
19. 42	20. 35	21. 13	·1386					
19. 46	21. 30	21. 41	·1382					
19. 53	20. 50	21. 59	·1375					
20. 11	22. 15	22. 12	·1378					
20. 18	22. 0	22. 35	·1388					
20. 36	24. 30	22. 55	·1394					
20. 40	24. 30	23. 10	·1391					
20. 56	26. 0	23. 23	·1387					
21. 26	26. 0	23. 35	·1389					
22. 9	31. 25	23. 42	·1395					
	***	23. 59	·1390					
22. 33	30. 55							
22. 43	32. 0							
22. 58:	31. 30							
23. 26	32. 55							
23. 36	32. 20							
23. 41	33. 40							
23. 56	32. 0							
23. 59	32. 0							
Aug. 11		Aug. 11		Aug. 11		Aug. 11		
0. 0	20. 32. 0	0. 0	·1390	0. 0	·03103	0. 0	59 ·6	61 ·0
0. 26	31. 40		***	1. 39	·03132	1. 0	60 ·4	61 ·5
1. 12	32. 10	0. 40	·1403	1. 51	·03127	2. 0	60 ·6	62 ·0
1. 32	31. 55	0. 55	·1405	3. 19	·03153	3. 0	60 ·6	62 ·2
1. 41	32. 40	1. 26	·1404	3. 38	·03166	9. 0	59 ·7	61 ·0
2. 6	31. 0	1. 41	·1406	4. 41	·03180	22. 0	59 ·7	61 ·0
2. 11	31. 20	1. 47	·1411	5. 14	·03201			
2. 17	30. 30	2. 11	·1403	5. 41	·03205			
2. 28	31. 5	2. 27	·1408	6. 32	·03201			
2. 34	30. 20	2. 40	·1404	6. 55	·03194			
2. 53	30. 25	2. 54	·1405	7. 26	·03200			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 11		Aug. 11		Aug. 11				
h m	° ′ ″	h m		h m		h m	°	°
3. 26	20. 29. 5	3. 11	·1400	7. 47	·03192			
3. 38	30. 20	3. 20	·1403	8. 36	·03213			
3. 51	29. 55	3. 25	·1400	9. 20	·03202			
3. 59	29. 55	3. 43	·1416	10. 39	·03140			
4. 11	29. 0	3. 55	·1412	10. 50	·03100			
4. 18	29. 0	4. 8	·1412	11. 41	·03077			
4. 43	27. 0	4. 20	·1396	12. 4	·03088			
4. 53	27. 10	4. 43	·1390	13. 12	·03076			
5. 6	26. 0	4. 57	·1401	13. 30	·03083			
5. 13	27. 20	5. 9	·1400	15. 4	·03048			
5. 23	27. 30	5. 18	·1406	16. 19	·03046			
5. 31	25. 15	5. 33	·1393	17. 19	·03020			
5. 38	25. 0	5. 43	·1398	17. 52	·03023			
5. 46	25. 10	5. 51	·1396	18. 26	·03044			
5. 58	23. 25	6. 12	·1405	19. 22	·03057			
6. 56	25. 25	6. 25	·1415	21. 59	·03060			
7. 17	25. 0	6. 45	·1417	23. 59	·03076			
7. 36	26. 5	7. 6	·1413					
7. 42	25. 0	7. 33	·1425					
7. 51	23. 30	7. 50	·1412					
7. 56	23. 25	7. 59	·1404					
8. 9	19. 0	8. 12	·1398					
8. 17	17. 25	8. 20	·1402					
8. 39	21. 10	8. 39	·1406					
8. 55	21. 0	8. 54	·1402					
9.⁏ 7	23. 55	9. 18	·1416					
9. 23	19. 0	9. 26	·1418					
9. 32	19. 40	9. 42	·1407					
9. 40	16. 10	9. 56	·1418					
9. 54	19. 55	10. 11	·1408					
10. 12	22. 50	10. 17	·1413					
10. 25	28. 40	10. 35	·1403					
10. 27	28. 40	10. 43	·1419					
10. 39	33. 55	10. 56	·1413					
10. 45	27. 0	11. 13	·1433					
10. 58	22. 20	11. 26	·1430					
11. 13	24. 30	11. 52	·1415					
11. 25	25. 55	12. 18	·1420					
11. 41	22. 0	12. 35	·1417					
11. 54	21. 20	12. 42	·1421					
11. 59	22. 50	13. 21	·1403					
12. 27	19. 55	14. 11	·1410					
12. 34	20. 35	14. 51	·1411					
13. 13	19. 10	15. 12	·1406					
13. 26	22. 20	16. 53	·1419					
13. 34	22. 30	17. 39	·1408					
13. 39	23. 40	18. 11	·1402					
13. 48	23. 5	18. 25	·1406					
13. 59	23. 55	18. 48	·1394					
14. 10	23. 20	19. 6	·1390					
14. 24	23. 30	19. 44	·1404					
14. 39	25. 0	20. 10	·1400					
15. 13	23. 55	20. 25	·1403					
15. 25	26. 5	20. 44	·1398					
15. 39	24. 40	21. 6	·1400					
15. 52	24. 40	21. 27	·1394					
16. 13	22. 25	22. 20	·1397					
16. 26	24. 30	22. 29	·1401					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 11		Aug. 11						
h m	° ′ ″	h m		h m		h m	°	°
16. 41	20. 25. 50	23. 6	·1404					
16. 47	25. 30	23. 43	·1406					
16. 56	26. 50	23. 51	·1411					
17. 7	25. 50	23. 59	·1406					
17. 12	26. 0							
17. 29	25. 20							
17. 38	26. 20							
17. 55	26. 20							
18. 13	27. 20							
18. 28	29. 15							
18. 37	28. 30							
18. 51	28. 40							
19. 18	32. 50							
19. 43	28. 40							
20. 9	26. 40							
20. 51	27. 35							
21. 28	26. 40							
21. 48	28. 0							
22. 17	27. 40							
22. 26	26. 30							
22. 39	26. 5							
22. 57	26. 30							
23. 50	30. 30							
23. 59	30. 20							
Aug. 12		Aug. 12		Aug. 12		Aug. 12		
0. 0	20. 30. 20	0. 0	·1406	0. 0	·03076	1. 0	60·8	62·2
0. 9	30. 15	0. 10	·1400	2. 3	·03152	5. 0	61·3	62·9
0. 28	32. 0	0. 29	·1402	2. 39	·03150	9. 30	61·4	62·6
0. 37	31. 40	0. 51	·1395	2. 43	·03168	21. 0	60·9	62·5
0. 41	30. 25	1. 2	·1404		***	22. 0	61·3	62·6
0. 45	30. 30	1. 43	·1398	3. 10	·03163	23. 0	61·7	62·7
0. 53	29. 0	1. 57	·1400	4. 39	·03197			
0. 57	30. 30	2. 22	·1408	5. 23	·03197			
1. 6	29. 50	2. 40	·1400	5. 38	·03205			
1. 24	29. 50	2. 44	·1402	6. 14	·03197			
1. 26	30. 40	2. 53	·1397	6. 57	·03192			
1. 37	30. 55	3. 5	·1406	7. 14	·03214			
1. 55	30. 0	3. 27	·1394	8. 7	·03197			
2. 18	30. 25	3. 44	·1400	8. 29	·03203			
2. 28	29. 55	3. 55	·1397	9. 26	·03209			
2. 38	30. 25	4. 21	·1408	10. 11	·03188			
2. 41	30. 0	4. 29	·1406	11. 12	·03182			
2. 47	31. 0	4. 52	·1411	12. 55	·03177			
2. 56	30. 0	5. 5	·1406	13. 27	·03158			
2. 58	30. 45	5. 29	·1398	14. 56	·03132			
3. 7	29. 45	5. 54	·1415	16. 13	·03140			
3. 25	29. 30	6. 24	·1400	17. 13	·03117			
3. 33	29. 45	6. 44	·1407	18. 7	·03120			
3. 51	28. 0	7. 8	·1413	19. 15	·03157			
3. 59	25. 50	7. 12	·1410	20. 13	·03153			
4. 24	27. 30	7. 27	·1434	21. 11	·03166			
4. 33	26. 20	8. 2	·1416	23. 59	·03187			
5. 4	27. 10	8. 24	·1406					
5. 23	26. 20	8. 43	·1415					
5. 34	26. 55	9. 12	·1407					
5. 43	26. 10	9. 35	·1410					
5. 56	27. 0	9. 55	·1421					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁏ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 12		Aug. 12						
h m	° ′ ″	h m		h m		h m	°	°
6. 17	20. 25. 45	10. 20	·1410					
6. 36	. 25. 45	10. 41	·1413					
6. 44	23. 50	11. 10	·1414					
7. 4	16. 50	11. 36	·1406					
7. 16	22, 15	12. 12	·1410					
7. 37	25. 40	12. 28	·1407					
7. 43	25. 10	12. 38	·1410					
7. 56	25. 50	13. 23	·1424					
8. 13	23. 50	14. 20	·1416					
8. 41	25. 0	14. 59	·1419					
8. 56	22. 40	15. 21	·1407					
9. 39	22. 25	15. 35	·1409					
9. 51	26. 0	15. 57	·1406					
10. 21	22. 50	16. 10	·1409					
10. 41	21. 10	16. 55	·1407					
10. 56	21. 0	17. 24	·1395					
11. 9	19. 25	18. 3	·1410					
12. 32	24. 0	18. 12	·1404					
12. 41	23. 25	18. 36	·1406					
12. 58	24. 10	18. 54	·1403					
13. 8	26. 55	18. 58	·1405					
13. 21	26. 30	19. 20	·1401					
13. 26	27. 20	19. 30	·1403					
13. 40	25. 25	19. 41	·1399					
13. 56	25. 25	19. 55	·1404					
14. 11	28. 40	20. 24	·1392					
14. 21	27. 40	20. 43	·1387					
14. 38	27. 25	20. 55	·1392					
14. 43	26. 30	21. 25	·1392					
14. 51	26. 55	21. 41	·1389					
15. 6	23. 0	21. 55	·1393					
15. 34	22. 30	22. 20	·1385					
15. 43	20. 55	22. 42	·1389					
15. 54	20. 40	23. 11	·1376					
16. 4	22. 15	23. 26	·1384					
16. 9	22. 10	23. 41	·1386					
16. 42	27. 20	23. 59	·1388					
17. 9	30. 30							
17. 18	30. 0							
17. 36	30. 45							
17. 51	29. 50							
18. 7	27. 10							
18. 17	24. 5							
18. 38	22. 25							
18. 42	22. 40							
18. 56	21. 20							
19. 0	23. 0							
19. 8	21. 10							
19. 11	22. 40							
19. 17	20. 40							
19. 32	22. 0							
19. 36	20. 30							
19. 41	20. 20							
19. 53	24. 30							
20. 19	22. 20							
20. 39	22. 50							
20. 42	21. 45							
21. 16	22. 25							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 12								
h m	° ′ ″	h m		h m		h m	°	°
21. 26	20. 24. 0							
21. 29	23. 5							
21. 41	23. 0							
22. 11	26. 0							
22. 19	25. 30							
22. 53	26. 20							
23. 4	27. 40							
23. 11	27. 30							
23. 31	29. 50							
23. 59	28. 25							
Aug. 13		Aug. 13		Aug. 13		Aug. 13		
0. 0	20. 28. 25	0. 0	·1388	0. 0	·03187	0. 0	61·6	63·6
0. 4	28. 35	0. 46	·1397	1. 56	·03240	1. 0	62·4	64·0
0. 13	28. 10	0. 57	·1383	3. 1[illegible]	·03305	3. 0	62·5	64·2
0. 42	33. 20	1. 26	·1388	9. 24	·03297	9. 0	62·2	63·7
1. 43	32. 0	2. 12	·1408	10. 11	·03254	21. 0	61·4	62·7
2. 9	32. 50	2. 40	·1400	10. 2[illegible]	·03248	22. 0	61·4	62·9
3. 46	28. 40	2. 44	·1403	11. 25	·03220	23. 0	61·7	63·2
4. 26	28. 40	2. 57	·1396	13. 42	·03198			
4. 52	27. 10	3. 13	·1395	14. 21	·03154			
5. 9	25. 30	3. 26	·1402	15. 56	·03167			
5. 24	25. 45	3. 41	·1399	17. 27	·03156			
5. 34	25. 15	4. 3	·1407	18. 45	·03187			
5. 38	25. 45	4. 26	·1398	22. 24	·03204			
6. 24	23. 55	4. 57	·1400	23. 59	·03207			
6. 40	20. 25	5. 25	·1406					
6. 55	23. 20	5. 39	·1403					
7. 6	23. 55	5. 43	·1407					
7. 17	25. 35	5. 55	·1400					
7. 36	23. 45	6. 11	·1413					
7. 51	23. 5	6. 35	·1404					
8. 3	23. 0	6. 51	·1424					
8. 16	24. 30	7. 13	·1410					
8. 27	24. 40	7. 31	·1406					
8. 43	23. 0	7. 41	·1410					
9. 0	23. 0	8. 13	·1408					
9. 17	19. 35	8. 58	·1402					
9. 28	20. 20	9. 32	·1412					
9. 39	17. 40	9. 43	·1430					
9. 56	19. 45	9. 55	·1423					
10. 14	19. 45	10. 22	·1410					
10. 26	18. 25	10. 51	·1411					
10. 51	22. 10	11. 12	·1407					
11. 0	22. 0	11. 23	·1409					
11. 13	20. 0	11. 41	·13[illegible]					
11. 26	19. 50	11. 54	·13[illegible]					
11. 41	17. 50	12. 14	·1394					
11. 55	18. 5	13. 18	·1402					
12. 3	21. 0	13. 27	·1411					
12. 24	21. 0	14. 6	·1405					
12. 41	23. 5	14. 22	·1399					
13. 8	23. 0	15. 12	·1412					
13. 32	25. 0	16. 0	·1412					
13. 42	28. 45	16. 41	·14[illegible]					
13. 46	28. 50	17. 3	·1402					
14. 0	32. 40	17. 32	·1405					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.13		Aug.13						
h m		h m				h m	°	°
14. 9	20. 32. 5	18. 16	·1400					
14. 34	25. 35	18. 59	·1383					
15. 35	21. 40	19. 14	·1388					
16. 8	23. 0	20. 11	·1385					
16. 26	23. 0	20. 26	·1391					
16. 51	26. 10	20. 46	·1394					
17. 18	26. 30	21. 10	·1388					
17. 38	24. 10	21. 25	·1387					
17. 49	24. 15	21. 55	·1379					
17. 57	23. 25	22. 22	·1384					
18. 15	23. 30	22. 30	·1382					
18. 23	23. 10	22. 41	·1385					
18. 28	24. 5	22. 55	·1382					
18. 53	24. 40	23. 35	·1388					
19. 7	23. 50	23. 59	·1386					
19. 17	22. 45							
20. 11	20. 40							
20. 17	19. 20							
21. 4	23. 50							
21. 26	23. 5							
21. 38	23. 40							
21. 43	22. 50							
22. 23	23. 30							
22. 28	25. 0							
	***							
23. 59	28. 5							
Aug.14		Aug.14		Aug.14		Aug.14		
0. 0	20. 28. 5	0. 0	·1386	0. 0	·03207	0. 0	62 ·1	63 ·7
0. 13	28. 10	0. 44	·1389	1. 8	·03216	1. 0	62 ·5	64 ·2
0. 22	27. 55	0. 56	·1391	4. 28	·03287	2. 0	62 ·4	64 ·0
0. 53	30. 10	1. 26	·1396	5. 54	·03301	3. 0	62 ·6	64 ·3
0. 57	29. 55	2. 10	·1404	6. 2	·03313	9. 0	62 ·3	63 ·8
1. 11	30. 15	2. 57	·1405	6. 56	·03317	21. 0	60 ·5	62 ·0
1. 24	29. 55	3. 13	·1404	9. 12	·03308	22. 30	60 ·9	62 ·8
1. 52	30. 15	3. 40	·1407	12. 43	·03215	23. 0	61 ·9	63 ·0
1. 56	31. 40	3. 43	·1406	13. 12	·03194			
2. 0	30. 20	3. 56	·1410	13. 22	·03197			
2. 7	30. 55	4. 20	·1406	14. 12	·03157			
2. 14	30. 10	4. 27	·1404	16. 13	·03177			
3. 4	29. 55	4. 51	·1410	17. 37	·03163			
3. 11	29. 5	5. 14	·1409	19. 53	·03180			
3. 58	28. 15	5. 24	·1419	21. 25	·03175			
4. 13	27. 20	5. 40	·1412	23. 40	·03191			
4. 58	27. 20	5. 55	·1402	23. 59	·03183			
5. 43	25. 10	6. 10	·1408					
5. 54	23. 30	6. 26	·1403					
6. 9	24. 15	6. 42	·1409					
6. 23	24. 10	6. 56	·1406					
6. 33	22. 45	7. 11	·1400					
6. 43	22. 10	7. 26	·1407					
6. 58	25. 10	7. 36	·1404					
7. 7	24. 45	7. 46	[illegible]					
7. 28	25. 20	7. 55	·1406					
8. 31	24. 10	8. 5	·1409					
8. 37	24. 50	8. 40	·1410					
9. 9	23. 0	8. 44	·1414					
9. 26	23. 20	9. 11	·1404					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.14		Aug.14						
h m	° ′ ″	h m		h m		h m	°	°
9. 43	20. 22. 40	9. 20	·1409					
10. 11	23. 55	9. 42	·1407					
10. 33	24. 30	9. 57	·1413					
11. 16	23. 15	10. 58	·1408					
11. 34	23. 40	12. 11	·1415					
11. 46	23. 25	12. 30	·1411					
12. 7	24. 50	13. 37	·1430					
12. 23	23. 30	14. 41	·1400					
12. 38	25. 25	15. 33	·1402					
12. 51	24. 0	16. 49	·1412					
13. 9	20. 15	17. 25	·1409					
13. 28	24. 50	17. 43	·1405					
14. 20	18. 45	17. 53	·1407					
14. 40	20. 35	18. 12	·1404					
15. 6	21. 0	18. 41	·1410					
15. 17	22. 20	19. 11	·1406					
15. 58	21. 30	19. 40	·1407					
16. 15	23. 0	20. 15	·1395					
16. 28	22. 50	20. 27	·1389					
16. 39	21. 45		***					
17. 8	20. 45	21. 22	·1386					
17. 25	22. 40	21. 54	·1385					
17. 30	22. 40	22. 21	·1385					
17. 39	23. 35		***					
18. 21	23. 25	23. 18	·1390					
18. 41	23. 35	23. 43	·1404					
19. 8	22. 0	23. 54	·1396					
19. 13	20. 30		(†)					
19. 20	21. 0							
19. 27	20. 45							
19. 43	22. 45							
20. 4	23. 45							
20. 39	22. 30							
20. 44	22. 55							
20. 57	22. 10							
21. 4	23. 20							
21. 13	22. 30							
22. 9	26. 10							
22. 13	26. 10							
22. 54	27. 50							
23. 0	29. 0							
23. 24	29. 10							
23. 51	32. 10							
23. 59	31. 40							
Aug.15		Aug.15		Aug.15		Aug.15		
0. 0	20. 31. 40		(†)	0. 0	·03183	0. 0	61 ·4	63 ·9
0. 29	33. 50	0. 48	·1397	1. 24	·03212	1. 0	61 ·7	63 ·5
0. 56	33. 0	1. 14	·1384	2. 0	·03253	2. 0	61 ·6	63 ·5
1. 9	33. 30	1. 27	·1392	5. 6	·03284	3. 0	61 ·6	63 ·5
1. 26	32. 40	1. 42	·1389	6. 43	·03258	9. 0	61 ·0	62 ·2
1. 44	30. 10	1. 57	·1393	8. 57	·03265	21. 0	60 ·3	61 ·7
1. 53	30. 0	2. 6	·1398	10. 7	·03225	22. 0	59 ·9	61 ·7
2. 3	31. 50	2. 12	·1393	13. 40	·03192	23. 0	60 ·1	61 ·9
2. 10	31. 30	2. 26	·1396	17. 14	·03150			
2. 26	32. 5	2. 40	·1394	18. 57	·03174			
3. 3	30. 20	2. 52	·1399	19. 56	·03157			
3. 10	29. 30	3. 12	·1401	22. 4	·03146			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							of H. F. Magnet.	of V. F. Magnet.
Aug.15		Aug.15		Aug.15				
h m	° ′ ″	h m		h m		h m	°	°
3. 17	20. 29. 30	3. 25	·1398	23. 30	·03109			
3. 30	30. 0	3. 36	·1401	23. 59	·03117			
3. 56	28. 35	3. 56	·1400					
4. 10	28. 55	4. 7	·1398					
4. 26	27. 40	4. 18	·1403					
4. 36	28. 20	4. 36	·1396					
4. 58	25. 0	4. 52	·1393					
5. 10	25. 20	5. 8	·1396					
5. 28	24. 55	5. 18	·1409					
5. 44	25. 15	5. 25	·1407					
5. 57	25. 0	5. 41	·1410					
6. 24	25. 25	6. 8	·1404					
	* * *	6. 54	·1413					
6. 49	25. 25	6. 59	·1407					
6. 53	24. 45	7. 14	·1410					
7. 2	25. 30	7. 36	·1408					
7. 13	24. 55	8. 30	·1411					
7. 28	25. 30	9. 43	·1408					
7. 38	25. 0	10. 12	·1411					
7. 54	25. 40	10. 41	·1408					
8. 38	25. 45	11. 24	·1407					
8. 56	25. 10	11. 26	·1411					
9. 8	25. 35	12. 13	·1406					
9. 25	25. 0	12. 26	·1409					
10. 55	24. 30	13. 49	·1405					
11. 4	25. 0	14. 6	·1408					
11. 26	24. 10	14. 12	·1406					
12. 4	24. 0	14. 25	·1409					
12. 10	24. 55	15. 6	·1404					
12. 18	24. 20	15. 21	·1407					
12. 51	25. 25	15. 43	·1402					
13. 26	23. 15	16. 10	·1405					
14. 0	26. 0	17. 26	·1400					
14. 41	24. 50	18. 11	·1402					
14. 53	25. 20	18. 29	·1399					
15. 23	24. 0	18. 56	·1395					
15. 45	23. 55	21. 5	·1388					
15. 58	24. 30	21. 23	·1391					
16. 41	22. 15	21. 41	·1389					
16. 58	21. 55	23. 7	·1384					
17. 21	22, 25	23. 59	·1391					
18. 26	21. 5							
19. 54	21. 45							
20. 12	22. 10							
20. 26	21. 35							
	* * *							
21. 7	21. 50							
21. 41	23. 5							
22. 28	25. 5							
22. 58	25. 40							
23. 43	27. 40							
23. 59	27. 45							
Aug.16		Aug.16		Aug.16		Aug.16		
0. 0	20. 27. 45	0. 0	·1391	0. 0	·03117	0. 0	59 ·9	61 ·9
0. 28	28. 5	0. 41	·1402	2. 29	·03178	1. 0	60 ·8	62 ·4
0. 43	30. 30	1. 43	·1402	4. 41	·03189	3. 0	59 ·8	62 ·3
1. 7	30. 20	1. 56	·1399	5. 14	·03197	9. 0	58 ·9	60 ·6
					* * *			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							of H. F. Magnet.	of V. F. Magnet.
Aug.16		Aug.16		Aug.16		Aug.16		
h m	° ′ ″	h m		h m		h m	°	°
1. 23	20. 31. 10	2. 14	·1411	5. 26	·03187	21. 0	[illegible]	[illegible]
1. 43	30. 20	3. 26	·1415	7. 50	·03174	22. 0	[illegible]·4	[illegible]
1. 55	29. 5	4. 41	·1399	9. 32	·03137	23. 0	[illegible]	60 ·3
2. 11	28. 55	5. 14	·1403	9. 51	·03110			
2. 23	27. 55	5. 24	·1404	10. 42	·03083			
2. 40	27. 55	5. 42	·1411	13. 57	·03041			
3. 21	27. 0	6. 12	·1408	17. 12	·03000			
3. 58	27. 50	6. 27	·1407	18. 52:	·03014			
4. 23	26. 45	6. 42	·1406	19. 57	·03004			
4. 43	24. 35	6. 55	·1401	21. 19	·02984			
4. 57	24. 40	7. 12	·1412	23. 59	·03017			
5. 8	26. 0	7. 56	·1402					
5. 21	24. 30	9. 12	·1405					
5. 28	26. 0	9. 28	·1421					
5. 32	25. 5	9. 43	·1416					
6. 41	25. 10	9. 57	·1422					
6. 58	21. 15	10. 11	·1416					
7. 12	21. 55	10. 41	·1410					
7. 38	24. 45	12. 25	·1416					
8. 49	24. 55	16. 56	·1414					
9. 11	24. 20	17. 11	·1415					
9. 23	25. 0	17. 24	·1412					
9. 33	27. 10	17. 43	·1415					
9. 54	22. 25	18. 25	·1410					
10. 6	23. 50	20. 9	·1404					
10. 23	23. 10	20. 38	·1404					
10. 50	24. 20	21. 45	·1397					
10. 57	23. 45	22. 45	·1397					
11. 11	23. 50	23. 12	·1391					
11. 21	24. 30	23. 59	·1399					
11. 53	24. 30							
12. 26	23. 35							
14. 49	22. 35							
16. 39	23. 0							
17. 6	22. 25							
17. 13	23. 5							
18. 4	21. 35							
18. 38	21. 55							
19. 58	20. 20							
21. 3	21. 35							
22. 11	24. 20							
22. 51	26. 30							
23. 8	27. 0							
23. 59	30. 30							
Aug.17		Aug.17		Aug.17		Aug.17		
0. 0	20. 30. 30	0. 0	·1399	0. 0	·03017	0. 0	59 ·1	61 ·6
0. 23	31. 50	0. 35	·1401	0. 40	·03017	1. 0	59 ·6	62 ·0
0. 41	31. 20	1. 39	·1408	3. 6	·03095	2. 0	59 ·6	61 ·3
1. 27	32. 0	2. 12	·1406	5. 20	·03126	3. 0	60 ·0	61 ·8
2. 43	29. 30	2. 45	·1408	9. 21	·03143	9. 0	60 ·5	62 ·8
2. 57	29. 30	3. 12	·1417	11. 30	·03057	21. 0	58 ·8	60 ·2
3. 29	28. 30	3. 40	·1417	13. 23	·03023	22. 0	58 ·8	60 ·2
3. 51	28. 45	4. 41	·1406	14. 11	·03033	23. 0	59 ·3	60 ·4
4. 21	28. 0	4. 56	·1404	17. 25	·02997			
4. 54	25. 45	5. 11	·1408	18. 19	·03019			
5. 41	26. 50	5. 33	·1419	18. 59	·03034			
6. 14	26. 30	5. 57	·1411	21. 12	·03008			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.17		Aug.17		Aug.17				
h m	° ′ ″	h m		h m		h m	°	°
6. 32	20. 27. 0	6. 12	·1409	23. 59	·03025			
6. 42	26. 30	6. 52	·1418					
7. 26	26. 40	7. 12	·1411					
7. 38	26. 0	7. 36	·1418					
8. 39	20. 0	7. 57	·1414					
8. 54	26. 30	8. 23	·1417					
9. 18	25. 10	8. 56	·1411					
9. 33	25. 25	9. 24	·1408					
9. 51	24. 20		***					
9. 58	24. 20	10. 12	·1411					
10. 23	21. 30	10. 35	·1416					
11. 13	23. 35	10. 55	·1412					
11. 53	21. 0	11. 12	·1412					
12. 25:	24. 30	11. 27	·1415					
13. 14	22. 50	12. 21	·1409					
13. 51	22. 50	13. 0	·1414					
14. 14:	24. 10	13. 44	·1409					
14. 56	20. 40	14. 20	·1414					
15. 28	21. 30	14. 46	·1416					
16. 0	23. 50	15. 41	·1407					
16. 10	23. 55	16. 14	·1411					
16. 28	25. 0	16. 29	·1416					
17. 23	23. 25	17. 12	·1416					
17. 28	23. 40	17. 35	·1409					
17. 38	23. 10	17. 57	·1410					
18. 18	25. 30	18. 44	·1415					
18. 54	23. 0	19. 58	·1404					
19. 12	22. 10	20. 11	·1407					
19. 40	22. 25	20. 58	·1403					
19. 51	21. 45	21. 20	·1397					
20. 6	21. 45	21. 40	·1397					
20. 33	22. 55	21. 52	·1393					
20. 55	22. 25	21. 56	·1397					
21. 7	23. 15	22. 27	·1399					
21. 42	23. 0	22. 40	·1403					
22. 25	25. 5	22. 55	·1399					
22. 33	24. 20	23. 11	·1402					
22. 50	26. 25	23. 38	·1408					
23. 8	25. 55	23. 42	·1405					
23. 28	27. 0	23. 51	·1403					
23. 34	28. 0	23. 59	·1407					
23. 39	27. 50							
23. 59	29. 30							
Aug.18		Aug.18		Aug.18		Aug.18		
0. 0	20. 29. 30	0. 0	·1407	0. 0	·03025	0. 0	59·6	61·0
0. 18	30. 0	0. 15	·1411	2. 34	·03094	1. 0	59·8	61·5
0. 43	30. 45	0. 21	·1409	4. 57	·03137	2. 0	60·1	61·8
1. 3	29. 55	0. 41	·1409	8. 56	·03166	3. 0	60·6	62·0
1. 6	30. 10	1. 4	·1401	10. 16	·03100	9. 0	61·0	63·0
1. 22	30. 0	1. 11	·1403	11. 10	·03023	21. 0	58·2	59·7
1. 37	31. 30	1. 21	·1402	13. 11	·02973			
2. 7	30. 20	1. 29	·1410	13. 52	·02928			
2. 28	31. 10	2. 11	·1405	15. 30	·02884			
3. 4	29. 55	2. 38	·1413	16. 12	·02878			
3. 23	30. 0	2. 45	·1403	16. 28	·02861			
3. 33	28. 40	3. 12	·1406	17. 21	·02836			
3. 48	29. 15	3. 24	·1408	17. 56	·02838			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.18		Aug.18		Aug.18				
h m	° ′ ″	h m		h m		h m	°	°
3. 56	20. 28. 50	3. 27	·1411	20. 4	·02918			
4. 9	29. 40	3. 39	·1405	23. 59	·02997			
4. 43	27. 35	3. 47	·1407					
5. 10	28. 20	4. 0	·1404					
5. 25	30. 5	4. 12	·1409					
5. 56	29. 20	4. 22	·1408					
6. 7	29. 40	4. 28	·1411					
6. 27	27. 55	4. 42	·1407					
7. 6	27. 40	5. 3	·1416					
7. 55	28. 10	5. 22	·1419					
8. 13	29. 30	5. 30	·1414					
8. 33	27. 0	5. 42	·1415					
8. 57	26. 55	5. 55	·1410					
9. 6	27. 20	6. 11	·1414					
10. 7	14. 15	6. 14	·1413					
10. 12	15. 30	6. 37	·1423					
10. 53	26. 40	6. 49	·1423					
11. 10	23. 45	7. 0	·1418					
12. 11	23. 10	7. 21	·1418					
12. 24	22. 15	7. 29	·1425					
12. 38	23. 35	7. 37	·1426					
	***	7. 42	·1424					
13. 4	23. 30	7. 56	·1427					
13. 19	27. 10	8. 12	·1420					
13. 40	25. 55	8. 24	·1415					
13. 56	23. 0	8. 41	·1421					
14. 8	23. 15	8. 43	·1418					
14. 17	22. 30	9. 11	·1424					
14. 25	23. 10	9. 15	·1414					
14. 32	20. 25	9. 24	·1410					
14. 38	20. 50	9. 42	·1414					
14. 51	19. 40	10. 4	·1395					
15. 3	22. 40	10. 26	·1406					
15. 9	22. 50	10. 43	·1414					
15. 36	18. 0	10. 55	·1411					
15. 44	18. 30	11. 6	·1419					
15. 53	17. 30	11. 26	·1414					
16. 3	20. 0	11. 43	·1407					
16. 13	21. 10	11. 55	·1417					
16. 28	25. 30	11. 59	·1414					
16. 43	23. 10	12. 11	·1418					
16. 53	24. 25	12. 14	·1415					
17. 7	24. 20	12. 29	·1412					
17. 12	25. 25	12. 34	·1417					
17. 23	23. 30	12. 46	·1414					
17. 32	25. 0	13. 22	·1417					
17. 50	23. 10	13. 41	·1423					
18. 0	21. 30	13. 53	·1417					
18. 28	21. 30	14. 11	·1421					
	***	14. 13	·1417					
19. 9	23. 40	14. 20	·1424					
19. 14	21. 55	14. 29	·1416					
19. 20	22. 55	14. 41	·1423					
19. 33	23. 10	15. 8	·1421					
19. 54	21. 5	15. 12	·1425					
20. 12	21. 0	15. 26	·1422					
20. 21	22. 0	15. 42	·1426					
20. 39	21. 20	15. 52	·1423					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 18		Aug. 18						
h m	° ′ ″	h m		h m		h m	°	°
20. 51	20. 21. 50	16. 8	·1424					
21. 0	21. 5	16. 14	·1429					
	***	16. 30	·1426					
22. 2	24. 30	16. 42	·1429					
22. 43	25. 40	17. 22	·1407					
23. 6	25. 25	17. 40	·1418					
23. 37	27. 30	17. 42	·1415					
23. 55	27. 20	17. 54	·1418					
23. 59	27. 30	17. 59	·1416					
		18. 13	·1418					
		18. 35	·1413					
		18. 55	·1402					
		19. 14	·1389					
		19. 25	·1395					
		19. 42	·1392					
			***					
		20. 24	·1405					
		20. 43	·1397					
			***					
		22. 27	·1394					
		22. 54	·1383					
		23. 59	·1392					
Aug. 19		Aug. 19		Aug. 19		Aug. 19		
0. 0	20. 27. 30	0. 0	·1392	0. 0	·02997	0. 10	59 ·8	61 ·0
0. 22	28. 0	0. 21	·1393	1. 41	·03037	9. 0	60 ·8	63 ·1
0. 29	27. 40	0. 27	·1390	2. 30	·03044	21. 0	61 ·0	63 ·0
0. 56	28. 20	0. 45	·1391	2. 43	·03040	22. 0	61 ·2	63 ·4
1. 18	27. 25	1. 0	·1395	3. 4	·03052	23. 0	61 ·2	63 ·7
1. 22	28. 5	1. 11	·1392	3. 57	·03074			
2. 11	27. 30	1. 28	·1398	7. 25	·03102			
2. 23	28. 20	1. 51	·1398	9. 24	·03137			
2. 43	26. 20	2. 16	·1400	11. 12	·03120			
2. 53	26. 55	2. 33	·1408	11. 43	·03105			
3. 3	25. 40	2. 43	·1401	12. 3	·03116			
3. 9	24. 45	2. 52	·1393	17. 10	·03083			
3. 26	23. 30	2. 56	·1396	18. 55	·03108			
3. 53	24. 40	2. 58	·1403	23. 59	·03116			
4. 9	24. 20	3. 13	·1404					
4. 43	25. 0	3. 23	·1398					
5. 13	24. 40	3. 44	·1407					
6. 18	25. 0	4. 11	·1411					
7. 7	26. 0	4. 24	·1408					
9. 12	24. 40	4. 52	·1414					
9. 24	25. 30	5. 12	·1410					
9. 33	24. 25	5. 36	·1415					
10. 55	24. 20	5. 59	·1412					
11. 1	25. 45	6. 17	·1415					
11. 9	25. 15	6. 34	·1411					
11. 21	25. 50	6. 57	·1412					
11. 46	22. 0	7. 11	·1409					
11. 56	23. 0	7. 50	·1410					
12. 9	22. 30	8. 20	·1407					
12. 26	23. 0	8. 28	·1409					
12. 40	22. 15	9. 3	·1405					
12. 55	23. 0	9. 27	·1410					
13. 39	22. 45	9. 33	·1415					
14. 18	21. 30	9. 41	·1409					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 19		Aug. 19						
h m	° ′ ″	h m		h m		h m	°	°
14. 54	20. 22. 0	9. 48	·1408					
15. 9	21. 40	11. 9	·1407					
15. 24	22. 30	11. 24	·1412					
15. 32	22. 20	11. 35	·1419					
15. 55	22. 50	11. 43	·1412					
16. 33	21. 20	11. 57	·1407					
16. 56	21. 20	12. 36	·1410					
17. 11	22. 25	13. 12	·1404					
17. 25	21. 40	13. 49	·1407					
18. 55	21. 0	14. 9	·1404					
19. 23	21. 10	15. 35	·1402					
19. 39	20. 30	16. 12	·1405					
19. 52	21. 10	16. 33	·1407					
19. 55	20. 30	16. 59	·1405					
20. 13	21. 30	17. 12	·1407					
20. 26	20. 25	17. 20	·1405					
20. 49	21. 40	17. 54	·1406					
20. 57	21. 20	17. 59	·1404					
21. 40	23. 30	18. 44	·1409					
21. 54	25. 10	20. 6	·1400					
22. 13	25. 40	20. 30	·1397					
	***	20. 42	·1399					
22. 32	27. 5	20. 57	·1397					
23. 12	28. 40	21. 11	·1398					
23. 27	28. 50	21. 17	·1396					
23. 59	29. 50	21. 45	·1394					
		21. 52	·1385					
		22. 15	·1382					
		22. 26	·1384					
		22. 34	·1388					
		22. 54	·1383					
		23. 59	·1390					
Aug. 20		Aug. 20		Aug. 20		Aug. 20		
0. 0	20. 29. 50	0. 0	·1390	0. 0	·03116	0. 0	61 ·6	64 ·0
0. 11	30. 0	0. 20	·1395	0. 46	·03116	1. 0	61 ·6	64 ·0
0. 19	30. 55	0. 27	·1393	1. 56	·03155	3. 0	61 ·7	64 ·1
0. 54	30. 5	0. 43	·1394	4. 41	·03177	9. 0	62 ·6	64 ·1
0. 57	30. 40	0. 57	·1403	5. 42	·03187	21. 0	61 ·1	62 ·5
1. 11	29. 50	1. 19	·1402	5. 50	·03179	22. 0	61 ·1	61 ·8
1. 26	29. 40	1. 34	·1407	6. 2	·03192	23. 0	61 ·1	62 ·0
1. 29	30. 10	2. 6	·1413	6. 26	·03184			
1. 39	30. 0	2. 14	·1406	8. 22	·03218			
1. 58	31. 10	2. 36	·1404	11. 35	·03206			
2. 8	30. 10	2. 50	·1407	14. 9	·03183			
2. 47	29. 40	3. 3	·1405	15. 25	·03142			
3. 49	27. 10	3. 45	·1410	17. 12	·03128			
4. 48	27. 0	3. 56	·1408	19. 12	·03144			
4. 58	26. 10	4. 12	·1410	23. 59	·03120			
5. 26	25. 35	4. 28	·1407					
5. 41	26. 5	4. 40	·1411					
5. 49	26. 50	4. 58	·1413					
5. 57	25. 20	5. 9	·1410					
6. 5	25. 35	5. 26	·1411					
6. 11	25. 10	5. 42	·1407					
6. 26	26. 10	5. 54	·1412					
7. 4	26. 5	6. 2	·1423					
7. 25	25. 0	6. 10	·1417					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 20		Aug. 20						
h m	° ′ ″	h m		h m		h m	°	°
7. 42	20. 25. 35	6. 13	·1419					
8. 3	24. 30	6. 26	·1409					
8. 25	15. 20	6. 51	·1406					
8. 53	19. 0	6. 57	·1409					
8. 59	18. 5	7. 12	·1406					
9. 23	20. 25	7. 26	·1411					
9. 37	19. 20	7. 40	·1412					
9. 43	20. 10	7. 56	·1403					
9. 51	19. 30	8. 12	·1404					
10. 15	22. 10	8. 20	·1403					
10. 28	22. 20	8. 34	·1415					
11. 4	21. 0	8. 40	·1420					
12. 7	24. 10	9. 12	·1411					
13. 16	24. 10	9. 22	·1413					
13. 29	23. 25	9. 40	·1401					
13. 48	24. 20	9. 56	·1396					
14. 4	23. 55	10. 20	·1399					
14. 7	24. 40	10. 27	·1398					
14. 40	23. 20	10. 42	·1404					
14. 55	24. 10	11. 14	·1403					
15. 9	23. 0	11. 41	·1408					
15. 20	24. 10	11. 50	·1406					
15. 38	21. 0	12. 3	·1409					
15. 49	21. 55	12. 12	·1407					
15. 53	23. 20	12. 40	·1409					
16. 12	23. 5	13. 11	·1409					
16. 33	25. 10	13. 30	·1406					
16. 41	24. 0	14. 5	·1410					
17. 5	24. 30	14. 12	·1408					
17. 23	23. 0	15. 12	·1413					
17. 39	23. 30	15. 28	·1419					
17. 53	20. 45	15. 35	·1416					
	***	15. 56	·1407					
18. 38	20. 30	16. 27	·1407					
18. 43	21. 25	16.;38	·1404					
18. 51	20. 0	17. 4	·1409					
	***	17. 13	·1406					
19. 37	21. 50	17. 39	·1414					
19. 42	21. 0	17. 44	·1406					
20. 6	22. 30	18. 1	·1410					
20. 11	22. 10	18. 25	·1415					
	***	18. 45	·1409					
20. 39	24. 30	19. 11	·1411					
22. 15	24. 35	19. 38	·1399					
22. 39	27. 25	20. 18	·1387					
23. 12	28. 0	21. 36	·1386					
23. 20	27. 30	22. 5	·1387					
23. 38	27. 20	22. 21	·1384					
23. 59	28. 5	22. 39	·1387					
		22. 55	·1386					
		23. 0	·1391					
		23. 14	·1387					
		23. 26	·1390					
		23. 55	·1398					
		23. 59	·1397					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug. 21		Aug. 21		Aug. 21		Aug. 21		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 28. 5	0. 0	·1397	0. 0	·03120	0. 0	61 ·1	62 ·5
0. 24	30. 0	0. 25	·1403	3. 40	·03198	1. 0	61 ·7	63 ·0
1. 23	30. 5	0. 48	·1401	7. 12	·03187	2. 0	61 ·7	63 ·0
1. 43	29. 30	1. 20	·1405	7. 41	·03199	3. 0	61 ·8	63 ·0
1. 55	29. 40	1. 27	·1404	16. 49	·03117	9. 0	61 ·6	63 ·0
2. 20	28. 40	1. 51	·1410	19. 40	·03139	21. 0	60 ·0	61 ·7
2. 32	28. 40	2. 7	·1417	21. 21	·03120	22. 0	60 ·9	61 ·7
2. 57	27. 40	2. 25	·1411	23. 59	·03118	23. 0	61 ·4	62 ·1
3. 9	28. 20	2. 43	·1415					
3. 18	26. 50	3. 11	·1409					
3. 24	27. 25	3. 13	·1413					
3. 57	25. 30	3. 27	·1405					
4. 42	25. 0	3. 41	·1402					
5. 50	25. 25	4. 0	·1412					
6. 56	25. 0	4. 13	·1415					
7. 23	18. 45	4. 25	·1410					
7. 54	22. 30	4. 39	·1408					
7. 56	22. 40	5. 12	·1414					
8. 11	24. 5	5. 29	·1410					
8. 27	24. 20	5. 41	·1416					
8. 43	25. 10	5. 55	·1412					
10. 8	24. 30	6. 11	·1413					
10. 25	25. 0	6. 37	·1410					
10. 56	24. 20	6. 48	·1411					
11. 18	24. 30	7. 21	·1404					
11. 55	23. 40	7. 45	·1419					
12. 39	23. 20	8. 12	·1413					
12. 54	25. 15	8. 40	·1409					
13. 9	24. 50	9. 11	·1413					
13. 28	23. 0	9. 46	·1412					
14. 16	23. 35	11. 12	·1409					
14. 42	22. 40	11. 25	·1413					
15. 12	24. 30	11. 40	·1410					
15. 38	25. 40	12. 10	·1409					
16. 4	25. 40	12. 45	·1409					
16. 26	24. 30	12. 57	·1413					
16. 47	25. 30	13. 26	·1410					
16. 58	25. 0	14. 6	·1409					
17. 14	25. 55	14. 27	·1411					
17. 53	25. 50	14. 53	·1407					
18. 24	23. 10	15. 2	·1411					
18. 49	22. 25	15. 11	·1407					
18. 57	22. 35	15. 15	·1410					
19. 11	21. 30	15. 27	·1407					
21. 34	22. 30	15. 55	·1410					
22. 9	23. 40	16. 39	·1414					
22. 21	23. 30	17. 11	·1406					
23. 59	27. 50	17. 42	·1406					
		18. 7	·1413					
		18. 42	·1409					
		19. 27	·1402					
		20. 6	·1402					
		20. 27	·1397					
		21. 29	·1394					
		22. 15	·1393					
		22. 35	·1397					
		22. 47	·1395					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
h m	° ′ ″	Aug.21 h m		h m		h m	°	°
		23. 56	·1397					
		23. 59	·1398					
Aug.22		Aug.22		Aug.22		Aug.22		
0. 0	20. 27. 50	0. 0	·1398	0. 0	·03118	0. 0	61·8	62·4
0. 41	29. 10	0. 41	·1401	1. 19	·03122	1. 0	61·6	62·8
0. 57	28. 30	0. 56	·1401	3. 20	·03156	2. 0	61·7	62·8
1. 6	28. 50	1. 8	·1405	9. 32	·03183	3. 0	61·6	62·7
3. 17	25. 40	1. 25	·1404	11. 26	·03134	9. 0	62·4	63·2
4. 10:	23. 30	4. 27	·1409	13. 41	·03084	21. 0	59·9	61·0
5. 4	22. 55	4. 55	·1408	13. 57	·03093	22. 0	60·4	62·0
5. 55	23. 25	5. 25	·1411	14. 40	·03056	23. 0	60·2	62·0
6. 53	22. 55	5. 54	·1408	15. 43	·03041			
7. 4	21. 45	6. 11	·1407	16. 22	·03020			
8. 40	23. 40	6. 20	·1411	19. 56	·03042			
8. 58	23. 20	6. 35	·1407	23. 59	·03018			
11. 11	24. 5	7. 11	·1411					
11. 28	23. 20	7. 51	·1411					
12. 6	24. 30	8. 12	·1408					
12. 34	24. 0	8. 35	·1412					
12. 57	24. 50	8. 52	·1412					
13. 7	23. 40	9. 4	·1409					
13. 21	24. 0	10. 5	·1412					
13. 41	23. 20	10. 59	·1409					
14. 6	29. 20	11. 11	·1413					
14. 21	28. 40	11. 41	·1410					
14. 43	24. 15	11. 57	·1413					
15. 14	22. 55	12. 43	·1410					
15. 43:	25. 10	13. 32	·1413					
16. 24	20. 30	13. 53	·1409					
16. 27	20. 40	14. 27	·1419					
16. 38	19. 50	14. 57	·1412					
16. 54	19. 50	15. 34	·1409					
17. 11	21. 10	16. 7	·1416					
17. 22	21. 10	16. 25	·1416					
17. 40	22. 45	16. 53	·1407					
18. 10	22. 10	17. 12	·1408					
18. 33	20. 40	17. 27	·1405					
19. 9	20. 40	18. 11	·1410					
19. 55	23. 40	18. 42	·1406					
20. 26	23. 40	19. 8	·1395					
20. 55	24. 5	19. 37	·1396					
21. 8	25. 0	19. 47	·1399					
21. 28	25. 0	20. 27	·1399					
21. 41	25. 30	21. 21	·1393					
21. 56	25. 25	22. 28	·1395					
22. 10	26. 10		(†)					
22. 15	25. 30	23. 59	·1410					
22. 28	27. 40							
	(†)							
Aug.23		Aug.23		Aug.23		Aug.23		
	(†)	0. 0	·1410	0. 0	·03018	0. 0	60·5	62·0
0. 11	20. 33. 20	0. 19	·1407	0. 55	·03052	1. 0	61·2	62·5
0. 20	32. 40	0. 36	·1416	3. 12	·03180	3. 0	61·8	63·9
0. 49	34. 55	0. 40	·1418	4. 2	·03240	9. 0	62·8	65·9
1. 41	34. 25	0. 44	·1411	4. 26	·03321	21. 0	62·1	63·7
2. 53	35. 45	1. 26	·1411	4. 43	·03324	22. 0	62·4	63·8

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Aug.23 h m	° ′ ″	Aug.23 h m		Aug.23 h m		Aug.23 h m	°	°
3. 6	20. 34. 50	1. 41	·1407	5. 39	·03262	23. 0	63·1	64·5
3. 11	36. 5	2. 6	·1413	5. 52	·03260			
3. 21	36. 30	2. 24	·1409	6. 12	·03242			
3. 39	34. 20	2. 41	·1413					
3. 56	38. 35	2. 57	·1421	6. 54	·03253			
4. 6	37. 30	3. 4	·1419	6. 57	·03242			
4. 17	34. 0	3. 24	·1431	7. 15	·03258			
4. 26	30. 10	3. 35	·1428	7. 40	·03283			
4. 36	31. 20	3. 49	·1432	7. 44	·03268			
4. 55	24. 40	4. 11	·1416	7. 54	·03312			
4. 57	25. 25	4. 30	·1419	8. 4	·03306			
5. 9	25. 40	4. 50	·1391	8. 12	·03316			
5. 27	27. 20	4. 57	·1386	8. 28	·03210			
5. 48	25. 20	5. 11	·1383	8. 36	·03252			
6. 9	28. 10	5. 20	·1393	8. 44	·03275			
6. 14	27. 5	5. 41	·1399	9. 41	·03284			
6. 39	26. 20	5. 59	·1419	11. 19	·03222			
6. 51	25. 30	6. 0	·1415	11. 24	·03237			
6. 58	27. 0	6. 10	·1418	11. 46	·03131			
7. 18	22. 45	6. 18	·1408	11. 54	·03116			
7. 39	20. 30	6. 34	·1417	12. 20	·03116			
7. 43	20. 55	6. 42	·1414	12. 39	·03139			
7. 53	19. 50	6. 52	·1416	13. 0	·03153			
8. 11	10. 25	7. 0	·1423	13. 26	·03133			
8. 26	20. 30	7. 14	·1414	13. 52	·03136			
8. 33	22. 20	7. 27	·1396	14. 19	·03077			
8. 53	6. 10	7. 43	·1405	14. 26	·03085			
9. 9	17. 10	7. 56	·1374	14. 51	·03077			
9. 26	20. 25	8. 0	·1364	15. 10	·03088			
9. 37	20. 25	8. 4	·1367	15. 46	·03090			
9. 53	23. 0	8. 9	·1365	15. 57	·03104			
10. 39	22. 25	8. 17	·1383	16. 35	·03122			
10. 58	24. 0	8. 20	·1380	17. 10	·03100			
11. 18	21. 45	8. 26	·1388	18. 14	·03112			
11. 26	22. 30	8. 35	·1357	18. 52	·03104			
11. 44	36. 30	8. 43	·1367	18. 59	·03111			
12. 7	27. 50	8. 56	·1386	19. 11	·03118			
12. 11	28. 0	9. 5	·1374	19. 19	·03116			
12. 39	21. 30	9. 41	·1391	19. 41	·03146			
12. 53	19. 50	9. 48	·1388	19. 55	·03142			
12. 58	19. 40	10. 20	·1397	20. 3	·03151			
13. 13	22. 30	10. 24	·1395	20. 9	·03142			
13. 33	19. 20	10. 54	·1401	20. 15	·03160			
13. 41	21. 0	11. 13	·1400	20. 26	·03160			
14. 1	26. 20	11. 26	·1406	20. 41	·03167			
14. 20	18. 10	11. 42	·1455	21. 9	·03188			
14. 29	20. 0	12. 6	·1414	21. 34	·03221			
14. 43	18. 45	12. 33	·1386	22. 20	·03228			
15. 11:	21. 20	13. 12	·1412	22. 54	·03252			
15. 53	19. 20	13. 28	·1402	23. 59	·03237			
15. 56	20. 30	13. 45	·1408					
16. 15	21. 40	14. 11	·1424					
16. 23	21. 20	14. 26	·1403					
16. 43	27. 0	14. 58	·1387					
17. 9	25. 5	15. 29	·1399					
17. 23	22. 50	15. 50	·1397					
17. 41	28. 35	15. 54	·1400					
17. 51	28. 20	16. 18	·1391					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug·23		Aug·23						
h m	° ′ ″	h m		h m		h m	°	
17.56	20.31.10	16.43	·1398					
18. 0	31. 0	17.12	·1410					
18. 7	32.50	17.26	·1403					
18.10	32.25	17.48	·1387					
18.18	33.30	17.56	·1379					
18.26	37.40	18.10	·1377					
18.33	35.30	18.13	·1379					
18.39	34.20	18.26	·1368					
18.43	36.50	18.29	·1374					
		18.36	·1378					
18.56	34.10	18.56	·1355					
19. 3	34.40	19.12	·1356					
19.13	32.50	19.19	·1349					
19.21	30.40	19.29	·1340					
19.32	28.40	19.41	·1336					
19.41	30.10	19.44	·1342					
19.43	27.40	19.59	·1329					
19.51	29.50	20.12	·1313					
19.55	28.10	20.20	·1319					
19.59	25.50	20.26	·1312					
20. 4	26.15	20.34	·1323					
20.13	23.40	20.45	·1354					
20.21	27.15	21.24	·1359					
20.28	26.20	21.43	·1369					
20.53:	37.45	21.57	·1377					
21.23	31.40	22.13	·1374					
21.33	31.50	22.27	·1380					
21.50	29.50	22.41	·1377					
21.58	31.25	22.57	·1378					
22.13	30. 0	23.12	·1383					
22.26	30. 0	23.59	·1377					
22.40	28.10							
22.57	28.30							
23.33	31.20							
23.41	31.20							
23.49	32. 0							
23.59	31. 0							
Aug·24		Aug·24		Aug·24		Aug·24		
0. 0	20.31. 0	0. 0	·1377	0. 0	·03237	0. 0	63·4	64·7
0.28	31.40	0.26	·1379	3.30	·03316	1. 0	63·7	64·9
1.26	29.30	0.55	·1384	6.23	·03328	3. 0	63·8	65·0
2. 3	29.30	2.19	·1383	6.25	·03320	9. 0	64·4	65·2
2.26	28.50	2.28	·1385	6.34	·03336	21. 0	62·1	63·5
2.39	28. 5	2.40	·1380	9.45	·03355	22. 0	63·1	64·0
2.42	28.15	2.45	·1385	12.32	·03300	23. 0	62·6	64·0
3.12	27.25	3.12	·1386	12.42	·03300			
3.28	28.30	3.33	·1403	13.30	·03253			
3.43	27.50	3.45	·1393	14.32	·03237			
4.23	27.30	3.57	·1399	16.53	·03226			
5.54	25. 5	4.19	·1397	17.40	·03207			
6.14	25. 0	4.43	·1397	20.15	·03228			
6.28	24.15	4.58	·1399	23.19	·03231			
6.44	25. 0	5.11	·1398	23.59	·03258			
7. 7	24.25	5.20	·1401					
7.58	24.30	5.46	·1400					
8.33	25.20	5.58	·1403					
8.58	23.55	6.11	·1401					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug·24		Aug.24						
h m	° ′ ″	h m		h m		h m	°	°
9.27	20.24.25	6.24	·1404					
10.27	23.35	6.27	·1393					
11.26	25.10	6.40	·1400					
12.27	23.30	6.42	·1399					
12.42	26. 0	6.49	·1405					
12.50	25.10	7. 4	·1399					
12.58	26.20	7.16	·1400					
13.12	26. 0	7.24	·1404					
13.38	23. 5	7.30	·1399					
14.10	23.25	7.52	·1398					
14.38	22.30	8. 0	·1401					
15. 6	22.45	8.11	·1397					
15.26	22. 0	8.14	·1400					
15.43	22.15	8.22	·1399					
15.57	21.40	8.39	·1403					
16.29	21.40	8.51	·1395					
16.57	20.30	9.14	·1396					
17.10	20.50	10.17	·1393					
17.20	20.25	10.56	·1395					
17.56	23.40	12. 3	·1394					
18. 6	23.40	12.14	·1396					
18.42	19.50	12.34	·1393					
19.11	19.30	12.49	·1403					
19.25	19. 5	13. 3	·1404					
19.36	19.40	13.20	·1399					
19.43	19. 0	13.41	·1394					
19.56	19.30	13.55	·1396					
20. 8	18.50	14. 3	·1394					
20.41	20.55	14.27	·1395					
20.56	20.25	14.41	·1391					
22.35	28. 0	15.45	·1394					
22.56	28. 0	16.43	·1391					
23.11	29. 5	16.57	·1395					
23.28	28.40	17.12	·1391					
23.59	30.10	17.20	·1393					
		17.40	·1387					
		17.55	·1383					
		18.25	·1391					
		18.55	·1391					
		19.28	·1385					
		19.56	·1382					
		20.15	·1383					
		20.44	·1379					
		20.55	·1381					
		21.26	·1381					
		22. 9	·1374					
		22.41	·1376					
		22.55	·1374					
		23.13	·1381					
		23.45	·1388					
		23.59	·1384					
Aug·25		Aug·25		Aug·25		Aug·25		
0. 0	20.30.10	0. 0	·1384	0. 0	·03258	0. 0	63·1	64·6
0.19	32. 5	0.12	·1387	0.29	·03263	1. 0	63·6	65·1
0.40	30.40	0.48	·1378	2.34	·03347	2. 0	63·6	65·5
0.56	31.55	0.52	·1380	3. 4	·03348	3. 0	63·6	65·5
1. 3	30.50	0.56	·1384	3.28	·03357	9. 0	64·5	66·5

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.25		Aug.25		Aug.25		Aug.25		
h m	° ′ ″	h m		h m		h m	°	°
1. 9	20. 30. 50	1. 11	·1381	4. 26	·03357	21. 45	62 ·8	65 ·0
2. 7	28. 30	1. 30	·1384	5. 10	·03375			
2. 13	29. 30	1. 45	·1389	6. 3	·03376			
2. 25	28. 25	2. 12	·1391	7. 22	·03355			
2. 51	29. 20	2. 19	·1397	9. 53	·03360			
2. 58	28. 40	2. 25	·1392	12. 50	·03263			
3. 12	29. 45	2. 43	·1406	13. 55	·03240			
3. 56	28. 50	2. 56	·1405	14. 23	·03219			
4. 11	29. 40	3. 12	·1401	15. 28	·03235			
4. 45	29. 0	3. 22	·1409	16. 56	·03216			
5. 12	27. 20	3. 34	·1406	19. 24	·03247			
5. 28	27. 30	3. 44	·1408	22. 10	·03240			
5. 43	24. 0	3. 54	·1412	23. 59	·03258			
5. 57	23. 50	4. 14	·1402					
6. 8	24. 45	4. 26	·1392					
6. 26	22. 50	4. 45	·1392					
6. 38	23. 10	5. 6	·1396					
6. 59	25. 30	5. 14	·1401					
7. 13	24. 30	5. 22	·1395					
7. 33	25. 40	5. 29	·1396					
7. 51	23. 55	5. 42	·1391					
8. 28	23. 35	5. 54	·1393					
8. 43	24. 30	5. 57	·1396					
9. 31	25. 10	6. 8	·1394					
9. 51	24. 25	6. 12	·1398					
10. 3	25. 40	6. 20	·1394					
10. 22	24. 20	6. 43	·1398					
10. 26	25. 10	7. 3	·1398					
10. 46	25. 0	7. 14	·1395					
10. 56	23. 40	7. 27	·1398					
11. 23	24. 30	7. 40	·1395					
12. 43	23. 5	7. 48	·1398					
12. 56	23. 50	8. 21	·1396					
13. 11	23. 20	8. 30	·1399					
13. 43	27. 20	8. 45	·1396					
13. 55	27. 0	8. 57	·1399					
14. 8	29. 50	9. 14	·1394					
14. 28	25. 35	10. 19	·1403					
14. 54	23. 0	10. 47	·1399					
15. 42	23. 40	11. 36	·1395					
16. 3	22. 0	11. 49	·1402					
16. 13	22. 10	12. 20	·1400					
16. 17	23. 5	12. 44	·1397					
16. 44	22. 5	13. 25	·1399					
16. 56	22. 20	13. 54	·1396					
17. 9	21. 30	14. 13	·1401					
17. 28	21. 30	14. 54	·1400					
17. 40	22. 25	15. 12	·1395					
17. 43	21. 30	15. 45	·1399					
17. 56	22. 10	16. 6	·1397					
18. 19	21. 30	16. 34	·1398					
18. 27	22. 10	16. 54	·1400					
18. 39	21. 5	17. 11	·1397					
18. 45	21. 0	17. 32	·1393					
19. 6	22. 30	17. 38	·1396					
19. 13	22. 10	18. 8	·1395					
19. 23	20. 40	18. 20	·1390					
19. 34	21. 10	18. 26	·1393					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.25		Aug.25						
h m	° ′ ″	h m		h m		h m	°	°
19. 43	20. 20. 35	18. 41	·1391					
19. 58	21. 40	18. 57	·1393					
20. 17	20. 0	19. 10	·1398					
20. 40	20. 20	19. 18	·1392					
22. 44	27. 45	19. 26	·1394					
22. 56	29. 20	19. 53	·1388					
23. 59	31. 25	19. 58	·1391					
		20. 41	·1382					
		20. 56	·1383					
		21. 22	·1381					
		21. 30	·1384					
		21. 57	·1380					
		22. 43	·1379					
		22. 58	·1384					
		23. 36	·1384					
		23. 56	·1379					
		23. 59	·1388					
Aug.26		Aug.26		Aug.26		Aug.26		
0. 0	20. 31. 25	0. 0	·1388	0. 0	·03258	0. 35	64 ·1	66 ·2
0. 37	31. 40	0. 40	·1391	0. 42	·03276	5. 0	64 ·6	66 ·7
0. 54	31. 0	0. 55	·1390	2. 6	·03340	9. 20	64 ·8	66 ·9
1. 22	31. 40	1. 23	·1394	2. 32	·03351	21. 0	63 ·8	66 ·1
1. 33	32. 55	1. 37	·1401	2. 43	·03342	22. 0	64 ·2	66 ·0
1. 53	31. 55	1. 56	·1395	3. 19	·03366	23. 0	64 ·2	66 ·0
2. 4	31. 45	2. 11	·1397	6. 39	·03368			
2. 22	30. 50	2. 22	·1392	6. 56	·03380			
2. 35	31. 25	2. 41	·1392	9. 44	·03386			
2. 44	28. 30	2. 46	·1382	10. 41	·03372			
2. 54	28. 50	2. 56	·1388	11. 41	·03324			
2. 58	27. 30	3. 3	·1385	14. 5	·03320			
3. 34	26. 0	3. 24	·1396	16. 49	·03294			
3. 41	26. 0	3. 35	·1394	18. 20	·03307			
3. 52	24. 30	3. 52	·1399	23. 59	·03326			
4. 13	23. 15	3. 56	·1394					
4. 52	24. 30	4. 5	·1397					
5. 23	24. 5	4. 12	·1393					
5. 33	24. 55	4. 16	·1399					
5. 43	24. 20	4. 24	·1396					
6. 3	24. 45	4. 55	·1394					
6. 26	23. 50	5. 3	·1397					
6. 41	22. 20	5. 25	·1396					
6. 56	19. 40	5. 42	·1403					
7. 12	22. 30	6. 6	·1400					
7. 49	25. 10	6. 14	·1396					
8. 3	25. 0	6. 20	·1398					
8. 33	26. 0	6. 36	·1392					
8. 58	25. 20	6. 54	·1387					
9. 14	23. 20	7. 12	·1400					
9. 56	23. 30	7. 22	·1396					
10. 53	24. 25	8. 8	·1396					
11. 15	29. 30	8. 41	·1398					
11. 33	29. 30	9. 11	·1397					
11. 53	26. 20	9. 43	·1397					
12. 37	24. 10	9. 57	·1398					
13. 39	24. 10	10. 6	·1404					
13. 55	25. 10	10. 13	·1402					
14. 11	24. 10	10. 42	·1401					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 26		Aug. 26						
h m	° ′ ″	h m		h m		h m	°	
14. 43	20. 24. 0	10. 58	·1413					
15. 3	23. 0	11. 16	·1405					
15. 25	23. 0	11. 40	·1406					
15. 39	24. 10	12. 43	·1395					
15. 53	24. 20	13. 20	·1398					
16. 12	23. 35	13. 57	·1396					
16. 26	24. 35	15. 11	·1401					
17. 30	21. 0	15. 45	·1396					
17. 59	20. 20	16. 6	·1398					
18. 18	21. 40	16. 25	·1394					
18. 22	20. 20	16. 49	·1399					
18. 41	21. 20	17. 55	·1395					
19. 23	21. 40	18. 14	·1398					
19. 25	20. 30	18. 25	·1394					
19. 54	21. 30	18. 43	·1396					
21. 26	25. 40	19. 30	·1390					
21. 40	25. 20	19. 54	·1392					
22. 47	29. 0	20. 42	·1383					
22. 54	28. 45	21. 7	·1380					
23. 12	29. 20	21. 41	·1379					
23. 40	31. 20	21. 56	·1382					
23. 59	32. 0	22. 41	·1381					
		22. 56	·1379					
		23. 12	·1382					
		23. 59	·1386					
Aug. 27		Aug. 27		Aug. 27		Aug. 27		
0. 0	20. 32. 0	0. 0	·1386	0. 0	·03326	0. 0	64·3	66·1
0. 13	32. 25	0. 43	·1389	1. 37	·03343	1. 0	65·0	66·6
0. 51	31. 45	2. 41	·1397	3. 11	·03380	2. 0	65·0	66·6
1. 0	32. 0	2. 53	·1395	4. 54	·03396	3. 0	65·0	66·6
3. 3	27. 45	3. 6	·1397	7. 20	·03380	9. 0	63·9	64·4
3. 10	28. 0	3. 12	·1403	7. 43	·03397	9. 30	62·6	63·5
3. 36	26. 25	3. 37	·1395	9. 10	·03394	21. 0	61·9	64·1
3. 41	26. 55	3. 43	·1402	10. 49	·03290	22. 0	62·5	64·2
4. 9	25. 0	3. 55	·1397	11. 38	·03258	23. 0	62·6	64·5
4. 17	25. 0	4. 13	·1394	11. 46	·03236			
4. 50	23. 10	4. 20	·1395	12. 27	·03205			
5. 41	24. 15	4. 42	·1388	12. 45	·03212			
6. 23	23. 50	5. 8	·1392	13. 11	·03195			
6. 37	25. 0	5. 20	·1390	13. 40	·03187			
6. 58	24. 10	5. 51	·1395	14. 13	·03197			
7. 9	24. 15	6. 24	·1394	17. 11	·03186			
7. 28	21. 10	7. 6	·1398	18. 42	·03218			
8. 6	24. 40	7. 28	·1393	19. 56	·03205			
8. 25	24. 25	7. 51	·1402	21. 55	·03206			
8. 33	25. 50	8. 26	·1400	23. 59	·03236			
9. 3	24. 0	8. 42	·1407					
9. 13	24. 20	8. 58	·1403					
9. 25	23. 0	9. 13	·1399					
9. 33	23. 25	9. 43	·1406					
9. 43	22. 10	10. 12	·1429					
9. 58	16. 15	10. 24	·1419					
10. 12	20. 20	10. 43	;·1417					
10. 43	22. 45	11. 11	·1407					
11. 3	21. 35	11. 26	·1401					
11. 23	21. 35	11. 54	·1406					
11. 39	20. 40	12. 9	·1411					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 27		Aug. 27						
h m	° ′ ″	h m		h m		h m	°	°
11. 55	20. 16. 55	12. 41	·1387					
12. 38	22. 45	13. 11	·1391					
12. 51	23. 40	13. 37	·1400					
13. 6	30. 20	13. 54	·1395					
13. 14	29. 15	14. 14	·1398					
13. 24	29. 5	14. 21	·1404					
13. 32	26. 50	14. 40	·1406					
13. 41	26. 0	15. 7	·1401					
13. 54	24. 20	15. 45	·1403					
14. 22	25. 55	16. 27	·1409					
15. 23	21. 0	16. 49	·1403					
15. 38	21. 20	16. 54	·1405					
15. 53	20. 20	17. 12	·1400					
16. 12	21. 10	17. 25	·1401					
16. 23	20. 20	17. 41	·1404					
16. 37	20. 45	17. 52	·1399					
16. 50	19. 40	18. 5	·1399					
17. 6	20. 45	18. 10	·1394					
17. 51	21. 0	18. 24	·1391					
18. 4	22. 40	18. 53	·1399					
18. 26	23. 0	19. 55	·1390					
18. 56	27. 50	20. 43	·1384					
19. 0	26. 55	20. 57	·1380					
19. 9	27. 10	23. 24	.1389					
19. 21	26. 0	23. 32	·1395					
19. 40	26. 40	23. 43	·1389					
19. 45	26. 40	23. 59	·1395					
20. 3	24. 5							
20. 15	23. 35							
20. 21	25. 5							
20. 26	25. 40							
20. 36	23. 55							
	***							
21. 28	26. 45							
22. 18	27. 5							
23. 24	29. 35							
23. 41	30. 45							
23. 59	30. 10							
Aug. 28		Aug. 28		Aug. 28		Aug. 28		
0. 0	20. 30. 10	0. 0	·1395	0. 0	·03236	1. 0	63·6	65·3
0. 13	29. 30	0. 12	·1401	3. 22	·03328	3. 0	63·9	65·9
0. 55	30. 5	0. 55	·1400	8. 43	·03337	9. 0	61·4	63·9
1. 7	29. 45	0. 58	·1399	10. 12	·03258	21. 0	61·5	63·0
1. 40	29. 35	1. 27	·1401	13. 24	·03200	22. 0	60·6	62·2
1. 55	28. 20	1. 52	·1399	13. 58	·03200	23. 0	60·4	62·0
2. 1	29. 10	1. 57	·1402	14. 54	·03176			
2. 16	28. 30	2. 12	·1399	16. 33	·03176			
2. 46	29. 0	2. 20	·1403	17. 10	·03163			
3. 1	28. 0	2. 37	·1403	19. 26	·03198			
3. 23	28. 30	2. 44	·1405	22. 20	·03184			
4. 56	23. 55	3. 8	·1403	23. 59	·03163			
5. 9	24. 10	3. 22	·1409					
5. 23	23. 55	3. 33	·1403					
5. 42	24. 40	3. 51	·1399					
6. 26	23. 55	4. 6	·1392					
6. 41	24. 20	4. 24	·1396					
7. 13	23. 45	4. 52	·1403					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 28		Aug. 28						
h m	° ′ ″	h m		h m		h m	°	°
7. 54	20. 24. 30	5. 12	·1402					
8. 23	23. 55	5. 19	·1398					
8. 38	19. 45	5. 26	·1399					
9. 9	22. 50	5. 43	·1394					
9. 32	14. 55	6. 12	·1399					
10. 3	20. 30	6. 33	·1403					
10. 21	20. 30	6. 42	·1407					
10. 39	22. 55	7. 0	·1403					
11. 12	19. 20	7. 16	·1407					
11. 34	20. 20	7. 34	·1404					
11. 40	20. 10	7. 43	·1407					
11. 58	22. 25	7. 57	·1404					
12. 26	22. 30	8. 14	·1407					
12. 51	21. 20	8. 33	·1404					
	* * *	8. 45	·1406					
13. 25	20. 55	9. 25	·1406					
13. 58	23. 55	9. 43	·1424					
14. 9	23. 20	10. 26	·1404					
14. 20	24. 0	10. 41	·1407					
14. 39	23. 0	11. 6	·1403					
14. 56	22. 0	11. 43	·1398					
15. 13	21. 30	11. 59	·1401					
	* * *	12. 18	·1398					
16. 14	23. 10	12. 52	·1404					
16. 34	22. 25	13. 12	·1403					
16. 59	23. 0	13. 36	·1397					
17. 24	22. 35	13. 54	·1402					
17. 29	22. 50	14. 58	·1403					
18. 9	21. 30	15. 38	·1399					
18. 43	22. 20	15. 49	·1403					
18. 56	22. 0	16. 22	·1400					
	* * *	16. 42	·1403					
19. 13	22. 55	17. 20	·1400					
19. 26	22. 35	17. 42	·1403					
19. 33	23. 0	18. 27	·1399					
20. 2	22. 40	19. 14	·1398					
20. 10	21. 40	20. 36	·1394					
21. 9	22. 45	20. 43	·1391					
21. 33	22. 30	21. 24	·1387					
22. 19	24. 0	21. 44	·1396					
22. 29	24. 0	22. 41	·1394					
22. 53	24. 30	23. 12	·1396					
23. 59	29. 10	23. 38	·1395					
		23. 54	·1398					
		23. 59	·1395					
Aug. 29		Aug. 29		Aug. 29		Aug. 29		
0. 0	20. 29. 10	0. 0	·1395	0. 0	·03163	0. 0	62 ·0	63 ·2
0. 55	30. 15	0. 13	·1400	1. 36	·03200	1. 0	62 ·4	63 ·8
1. 51	28. 10	3. 56	·1409	3. 55	·03183	2. 0	60 ·1	62 ·5
3. 40	25. 30	5. 59	·1415	6. 41	·03122	3. 0	59 ·5	61 ·8
4. 18	25. 30	7. 56	·1413	12. 56	·03112	9. 0	58 ·8	60 ·6
5. 14	24. 55	8. 34	·1416	13. 41	·03092	21. 0	58 ·7	59 ·9
7. 26	23. 50	9. 6	·1412	14. 26	·03094	22. 0	58 ·8	59 ·9
9. 23	24. 25	9. 34	·1415	17. 25	·03056	23. 0	59 ·3	60 ·7
9. 40	25. 10	10. 6	·1413	19. 38	·03076			
9. 51	24. 50	12. 26	·1409	19. 43	·03065			
9. 58	25. 0	12. 56	·1413	20. 32	·03062			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug. 29		Aug. 29		Aug. 29				
h m	° ′ ″	h m		h m		h m	°	°
10. 13	20. 24. 10	13. 11	·1419	20. 47	·03044			
10. 41	24. 5	13. 30	·1421	20. 56	·03046			
11. 8	24. 55	14. 11	·1411	21. 4	·03028			
12. 13	24. 0	17. 7	·1418	22. 12	·03007			
12. 26	26. 0	17. 34	·1417	22. 34	·03037			
12. 43	25. 10	17. 49	·1415	22. 53	·03013			
12. 53	27. 15	17. 56	·1416	23. 59	·03042			
13. 14	25. 50	18. 12	·1413					
13. 33	23. 45	19. 30	·1408					
14. 7	23. 10	19. 38	·1404					
14. 26	24. 45	19. 55	·1408					
14. 59	23. 45	20. 6	·1413					
15. 13	23. 45	20. 14	·1407					
15. 38	22. 35	20. 25	·1413					
15. 57	23. 0	20. 45	·1409					
16. 25	22. 35	20. 56	·1397					
16. 40	23. 0	21. 11	·1401					
16. 51	22. 35	21. 23	·1395					
17. 8	22. 35	21. 29	·1386					
17. 26	21. 30	21. 46	·1379					
17. 42	21. 30	22. 11	·1367					
17. 54	22. 0	22. 26	·1385					
18. 4	21. 15	22. 36	·1380					
18. 41	20. 55	22. 50	·1377					
19. 27	21. 30	23. 0	·1386					
19. 29	22. 30	23. 11	·1381					
19. 33	19. 45	23. 27	·1382					
19. 46	20. 30	23. 42	·1387					
20. 9	24. 30	23. 52	·1376					
20. 14	23. 40	23. 59	·1379					
20. 23	23. 40							
20. 34	21. 35							
20. 41	21. 45							
20. 44	22. 10							
20. 54	20. 0							
21. 9	24. 0							
21. 23	22. 10							
21. 32	24. 0							
21. 53	24. 0							
22. 13	27. 10							
22. 26	32. 0							
22. 34	29. 20							
22. 41	28. 10							
22. 43	29. 30							
22. 51	29. 5							
23. 0	32. 30							
23. 9	31. 10							
23. 14	31. 55							
23. 23	31. 50							
23. 26	33. 10							
23. 32	32. 30							
23. 39	33. 10							
23. 53	30. 55							
23. 59	32. 30							
Aug. 30		Aug. 30		Aug. 30		Aug. 30		
0. 0	20. 32. 40	0. 0	·1379	0. 0	·03042	0. 0	59 ·7	61 ·4
0. 3	33. 30	0. 48	·1411	0. 19	·03066	1. 0	60 ·9	62 ·5

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.30		Aug.30		Aug.30		Aug.30		
h m	° ′ ″	h m		h m		h m	°	°
0. 11	20. 33. 10	0. 58	·1403	0. 33	·03060	2. 0	61 ·5	62 ·7
0. 17	36. 20	1. 3	·1395	0. 55	·03087	3. 0	61 ·3	62 ·6
0. 33	36. 10	1. 14	·1395	1. 10	·03083	9. 0	59 ·6	61 ·7
0. 37	33. 45	1. 32	·1409	1. 42	·03122	21. 0	59 ·6	60 ·1
0. 51	37. 30	1. 43	·1418	1. 54	·03120	22. 0	60 ·1	61 ·9
0. 59	41. 25	1. 51	·1409	2. 44	·03174	23. 0	60 ·1	62 ·0
1. 4	41. 20	1. 59	·1405	2. 52	·03162			
1. 8	42. 10	2. 21	·1404	3. 10	·03184			
1. 23	41. 50	2. 26	·1412	4. 49	·03168			
1. 30	44. 5	2. 43	·1417	4. 56	·03150			
1. 39	44. 10	2. 55	·1405	5. 14	·03155			
1. 46	45. 5	3. 12	·1422	5. 19	·03127			
	***	3. 16	·1416	5. 26	·03152			
2. 12	41. 10	3. 26	·1406		***			
2. 21	38. 40	3. 50	·1422	6. 58	·03133			
2. 30	37. 10	3. 57	·1425	8. 33	·03138			
2. 38	35. 30	4. 6	·1418	9. 8	·03144			
2. 43	35. 45	4. 23	·1417	10. 21	·03094			
2. 54	33. 30	4. 27	·1423	11. 12	·03077			
3. 25	35. 0	4. 40	·1417	11. 41	·03050			
3. 36	33. 10	4. 41	·1423	11. 58	·03038			
3. 57	32. 5	5. 3	·1409	12. 22	·03020			
4. 7	30. 50	5. 15	·1418	13. 9	·03003			
4. 26	30. 5	5. 24	·1386	13. 54	·02982			
4. 41	30. 20	5. 33	·1407	14. 18	·02982			
5. 11	29. 30	6. 6	·1408	14. 25	·02972			
5. 14	29. 50	6. 14	·1406	15. 24	·02957			
5. 25	27. 40	6. 18	·1410	16. 43	·02883			
6. 42	28. 20	6. 40	·1411	18. 22	·02932			
6. 56	27. 20	6. 54	·1403	21. 17	·02944			
7. 26	27. 45	7. 11	·1409	22. 56	·02983			
7. 41	26. 50	7. 25	·1409	23. 59	·02996			
7. 48	27. 10	7. 32	·1413					
8. 8	26. 30	8. 6	·1413					
8. 12	27. 30	8. 29	·1415					
8. 28	26. 20	8. 41	·1409					
8. 33	26. 20	9. 2	·1406					
8. 56	22. 45	9. 11	·1412					
9. 1	23. 25	9. 14	·1410					
9. 9	23. 0	9. 34	·1415					
9. 13	21. 50	9. 55	·1407					
9. 29	22. 30	10. 12	·1408					
9. 43	21. 30	10. 36	·1397					
9. 53	21. 45	10. 57	·1399					
9. 56	21. 20	11. 11	·1397					
10. 19	22. 55	11. 25	·1405					
10. 33	20. 25	11. 40	·1398					
10. 55	22. 0	11. 45	·1397					
11. 9	21. 25	12. 12	·1415					
11. 34	25. 30	12. 26	·1421					
11. 40	25. 0	12. 45	·1408					
11. 56	27. 40	12. 59	·1406					
12. 17	22. 45	13. 11	·1401					
	***	13. 20	·1399					
13. 17	18. 30	13. 48	·1401					
13. 26	19. 15	13. 55	·1398					
13. 53	15. 5	14. 12	·1399					
14. 3	15. 0	14. 15	·1403					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Aug.30		Aug.30						
h m	° ′ ″	h m		h m		h m	°	°
14. 24	20. 18. 30	14. 25	·1401					
14. 43	15. 35	14. 43	·1394					
15. 8	19. 40	14. 55	·1399					
15. 14	19. 40	15. 12	·1396					
15. 34	22. 5	15. 27	·1404					
15. 42	19. 40	15. 44	·1394					
15. 56	22. 5	15. 56	·1401					
16. 9	21. 0	16. 18	·1403					
16. 17	21. 40	16. 33	·1401					
16. 30	19. 30	16. 41	·1403					
16. 53	19. 20	16. 50	·1400					
17. 4	20. 5	16. 54	·1403					
17. 20	19. 20	17. 8	·1398					
17. 28	22. 40	17. 36	·1396					
17. 43	20. 35	18. 0	·1396					
18. 9	21. 0	18. 13	·1398					
18. 24	22. 30	18. 22	·1401					
18. 36	21. 30	18. 40	·1397					
19. 47	23. 0	19. 14	·1394					
19. 51	21. 55	20. 22	·1389					
19. 55	24. 10	20. 54	·1392					
19. 58	21. 5	21. 10	·1389					
20. 13	22. 10	21. 22	·1382					
20. 33	25. 0	21. 54	·1373					
20. 54	24. 5	22. 32	·1388					
20. 56	25. 55	22. 58	·1397					
21. 2	24. 10	23. 25	·1395					
21. 24	24. 0	23. 36	·1403					
21. 42	28. 0	23. 59	·1395					
22. 11	27. 5							
22. 25	28. 5							
22. 53	27. 30							
23. 1	28. 55							
23. 13	27. 30							
23. 27	27. 40							
23. 35	29. 20							
23. 49	31. 15							
23. 59	30. 50							
Aug.31		Aug.31		Aug.31		Aug.31		
0. 0	20. 30. 50	0. 0	·1395	0. 0	·02996	0. 0	60 ·7	62 ·8
0. 11	32. 5	0. 28	·1397	1. 22	·03043	1. 0	61 ·0	62 ·9
0. 24	31. 5	0. 44	·1393	4. 26	·03077	3. 0	61 ·5	63 ·0
0. 56	31. 55	0. 55	·1402	7. 21	·03098	8. 20	62 ·0	64 ·1
1. 41	29. 30	0. 59	·1399	7. 38	·03095	9. 0	60 ·1	61 ·9
2. 11	30. 25	1. 8	·1403	7. 56	·03107	9. 30	59 ·7	61 ·0
3. 6	28. 50	1. 11	·1402	8. 11	·03110	20. 0	60 ·8	61 ·5
3. 16	28. 50	1. 29	·1407	8. 22	·03103	21. 0	60 ·9	62 ·1
3. 28	27. 55	1. 43	·1406	8. 44	·03116	22. 0	61 ·3	62 ·5
4. 13	27. 30	1. 57	·1413	9. 34	·03078	23. 0	61 ·5	63 ·1
4. 32	26. 45	2. 19	·1410	9. 41	·03076			
5. 41	27. 0	2. 44	·1408	10. 53	·03034			
5. 59	26. 0	2. 56	·1410	13. 10	·03023			
6. 23	26. 40	3. 12	·1410	13. 44	·02997			
6. 52	25. 50	3. 20	·1414	14. 12	·02998			
7. 25	26. 5	3. 36	·1409	14. 34	·02972			
7. 40	22. 0	3. 41	·1413	14. 44	·02980			
8. 9	25. 10	3. 46	·1409	15. 12	·02966			

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Aug.31		Aug.31		Aug.31				
h m	° ′ ″	h m		h m		h m	°	°
8. 26	20. 21. 20	3. 55	·1415	15. 44	·02963			
8. 57	25. 0	4. 8	·1410	16. 12	·02977			
9. 11	23. 30	4. 21	·1413	16. 59	·02960			
9. 17	24. 45	4. 30	·1409	18. 54	·03007			
9. 25	24. 0	5. 11	·1410	23. 2	·03048			
9. 36	24. 0	5. 25	·1413	23. 59	·03048			
9. 53	26. 30	6. 0	·1407					
9. 56	26. 30	6. 15	·1410					
9. 58	28. 0	6. 59	·1411					
10. 25	26. 40	7. 16	·1410					
10. 37	26. 55	7. 24	·1412					
10. 53	23. 30	7. 41	·1404					
11. 8	24. 30	7. 55	·1413					
11. 47	21. 45	8. 6	·1411					
12. 13	21. 5	8. 12	·1412					
12. 24	20. 15	8. 24	·1406					
12. 30	20. 15	9. 6	·1403					
12. 53	22. 40	9. 20	·1412					
13. 11	23. 35	9. 41	·1403					
13. 47	23. 0	9. 55	·1407					
14. 11	27. 10	10. 5	·1406					
14. 28	26. 50	10. 29	·1408					
14. 39	25. 25	10. 57	·1401					
14. 43	27. 0	11. 14	·1408					
14. 58	25. 30	11. 24	·1405					
15. 21	22. 5	11. 42	·1405					
15. 38	23. 0	11. 56	·1410					
15. 49	21. 25	11. 58	·1408					
16. 6	23. 10	12. 12	·1415					
16. 34	27. 35	12. 40	·1404					
16. 45	27. 40	13. 3	·1394					
16. 58	26. 10	13. 41	·1407					
17. 8	24. 20	14. 5	·1399					
18. 3	20. 35	14. 35	·1393					
18. 13	21. 20	15. 25	·1406					
18. 28	20. 45	16. 3	·1388					
19. 24	23. 30	16. 22	·1391					
19. 43	22. 0	16. 53	·1398					
20. 39	22. 0	17. 8	·1398					
21. 55	24. 25	17. 28	·1406					
23. 8	28. 30	18. 12	·1396					
23. 24	28. 0	18. 26	·1389					
23. 53	29. 0	18. 41	·1390					
23. 59	28. 55	18. 50	·1394					
		19. 15	·1391					
		19. 26	·1394					
		21. 11	·1388					
		21. 22	·1389					
		22. 6	·1388					
		22. 38	·1384					
		22. 59	·1387					
		23. 20	·1386					
		23. 44	·1389					
		23. 59	·1393					
Sept. 1		Sept. 1		Sept. 1		Sept. 1		
0. 0	20. 28. 55	0. 0	·1393	0. 0	·03048	0. 0	61 ·6	63 ·1
0. 19	30. 0	0. 26	·1396	1. 26	·03066	1. 0	62 ·1	63 ·5

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 1		Sept. 1		Sept. 1		Sept. 1		
h m	° ′ ″	h m		h m		h m	°	
1. 17	20. 31. 0	1. 57	·1408	2. 3	·03088	2. 0	62 ·1	63 ·0
1. 38	31. 0	2. 19	·1400	5. 4	·03133	3. 0	62 ·6	64 ·0
1. 43	32. 45	4. 14	·1410	6. 53	·03152	9. 0	60 ·5	62 ·0
1. 58	32. 45	4. 50	·1408	7. 6	·03144	21. 25	61 ·6	63 ·0
2. 4	32. 0	5. 5	·1412	7. 22	·03158	22. 40	59 ·7	60 ·9
3. 8	29. 30	5. 17	·1409	9. 7	·03107			
4. 46	25. 50	5. 29	·1413	11. 11	·03068			
5. 10	25. 50	6. 14	·1407	11. 34	·03057			
5. 36	25. 0	6. 55	·1409	12. 52	·03076			
6. 2	25. 0	7. 10	·1403	13. 29	·03058			
6. 23	25. 50	7. 18	·1411	16. 11	·03083			
6. 37	25. 25	9. 12	·1406	19. 52	·03103			
6. 42	25. 45	10. 12	·1408	21. 32	·03088			
6. 55	25. 0	10. 22	·1433	23. 59	·03040			
7. 15	18. 40	10. 41	·1412					
7. 28	21. 20	10. 52	·1418					
7. 39	21. 5	11. 10	·1414					
7. 44	22. 10	11. 21	·1418					
8. 3	21. 20	11. 27	·1416					
8. 14	22. 25	12. 6	·1406					
8. 39	22. 0	12. 12	·1408					
8. 56	22. 40	12. 51	·1404					
9. 13	22. 0	13. 16	·1406					
10. 2	26. 5	13. 41	·1402					
10. 14	25. 0	14. 34	·1406					
10. 41	26. 20	15. 0	·1402					
10. 50	27. 30	15. 42	·1400					
10. 56	27. 30	16. 12	·1404					
11. 17	28. 30	16. 51	·1405					
11. 41	24. 30	17. 42	·1400					
12. 2	23. 0	17. 55	·1403					
12. 23	23. 0	18. 18	·1400					
12. 32	23. 55	18. 33	·1401					
12. 36	26. 30	19. 12	·1400					
12. 59	29. 40	19. 25	·1402					
13. 14	28. 40	20. 18	·1397					
13. 25	28. 40	21. 44	·1394					
14. 41	23. 30	23. 26	·1396					
15. 40	22. 35	23. 59	·1396					
15. 51	23. 15							
16. 51	21. 20							
17. 24	22. 0							
17. 27	23. 0							
17. 39	21. 55							
18. 9	22. 40							
18. 17	21. 55							
18. 36	22. 40							
18. 49	22. 20							
19. 3	22. 55							
19. 17	22. 30							
19. 22	22. 55							
19. 39	22. 0							
19. 51	23. 0							
21. 23	24. 50							
21. 32	25. 25							
21. 43	24. 30							
	* * *							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Sept. 1	
h m	° ′ ″
22. 59	20. 27. 35
23. 59	29. 55
Sept. 2	
0. 0	20. 29. 55
1. 4	31. 0
1. 34	30. 0
1. 56	29. 50
2. 33	27. 25
3. 23	26. 30
4. 21	24. 20
4. 49	24. 10
5. 11	23. 25
5. 33	23. 35
6. 22	24. 30
6. 55	22. 20
7. 13	23. 50
7. 25	21. 40
7. 56	20. 10
8. 21	22. 40
8. 27	20. 50
9. 6	23. 30
9. 39	24. 0
9. 51	23. 40
10. 26	24. 5
10. 51	23. 20
11. 17	24. 45
11. 37	23. 40
11. 59	25. 50
12. 24	25. 40
13. 10	23. 5
13. 28	24. 40
14. 4	23. 25
14. 21	23. 55
14. 49	22. 45
14. 57	22. 55
15. 52	22. 0
17. 11	23. 0
18. 9	22. 20
18. 56	22. 30
19. 23	22. 0
19. 47	22. 0
19. 54	21. 30
21. 41	24. 45
22. 11	26. 40
22. 16	27. 35
22. 25	27. 25
22. 57	28. 35
23. 27	28. 30
23. 59	29. 55
Sept. 3	
0. 0	20. 29. 55
0. 25	30. 30
1. 28	30. 5
1. 41	30. 30
h m	° ′ ″
2. 54	20. 27. 20
3. 4	27. 40
3. 56	25. 40
4. 55	25. 10
6. 9	26. 0
6. 26	24. 35
6. 49	24. 40
7. 4	26. 0
7. 12	26. 0
7. 40	27. 0
7. 58	26. 0
8. 11	26. 10
9. 14	24. 25
9. 36	24. 55
10. 6	23. 40
10. 14	24. 20
10. 30	23. 45
10. 58	23. 45
11. 21	24. 20
11. 58	23. 20
12. 21	24. 50
12. 41	22. 55
12. 58	29. 55
13. 9	29. 5
13. 15	29. 10
14. 6	24. 0
14. 20	20. 55
14. 43	19. 55
15. 21	19. 50
16. 10	20. 50
16. 44	24. 10
17. 26	23. 0
17. 51	21. 30
17. 56	21. 55
18. 26	21. 0
18. 51	21. 40
19. 59	21. 20
21. 33	23. 20
21. 44	24. 40
22. 3	24. 30
22. 29	26. 10
22. 38	25. 35
22. 58	25. 35
23. 39	27. 30
23. 59	28. 0
Sept. 4	
0. 0	20. 28. 0
0. 22	28. 15
0. 29	27. 30
0. 38	28. 10
0. 43	27. 55
1. 19	28. 5
2. 13	27. 0
2. 21	27. 20
2. 37	26. 25
4. 49	24. 15
5. 13	24. 35

Greenwich Mean Solar Time	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
h m	
Sept. 2	
0. 0	·1396
0. 26	·1397
1. 6	·1399
1. 20	·1397
1. 34	·1400
1. 44	·1399
1. 56	·1403
2. 12	·1400
2. 24	·1402
2. 39	·1398
2. 57	·1402
3. 8	·1400
3. 26	·1408
3. 43	·1402
3. 59	·1398
4. 23	·1398
4. 45	·1398
5. 6	·1400
5. 20	·1403
5. 41	·1406
5. 50	·1405
6. 12	·1406
6. 19	·1404
6. 24	·1408
6. 35	·1406
6. 49	·1411
7. 6	·1413
7. 18	·1410
7. 33	·1420
7. 43	·1416
7. 56	·1418
8. 23	·1408
8. 39	·1419
9. 9	·1408
9. 59	·1408
10. 19	·1406
10. 28	·1408
10. 49	·1404
11. 11	·1406
11. 33	·1406
12. 57	·1408
13. 22	·1405
16. 20	·1403
18. 41	·1400
20. 24	·1401
21. 43	·1397
22. 48	·1396
23. 59	·1409
Sept. 3	
0. 0	·1409
1. 12	·1410
1. 22	·1412
1. 27	·1410
h m	
1. 42	·1416
2. 13	·1413
2. 41	·1414
2. 54	·1410
3. 3	·1416
3. 13	·1413
3. 18	·1416
3. 29	·1413
4. 18	·1416
5. 22	·1413
5. 34	·1416
5. 45	·1415
5. 54	·1409
6. 11	·1414
6. 29	·1413
7. 3	·1419
7. 22	·1416
7. 54	·1423
8. 41	·1417
8. 50	·1411
10. 9	·1415
10. 56	·1412
11. 14	·1416
11. 56	·1414
12. 15	·1416
12. 43	·1413
13. 12	·1422
13. 47	·1412
13. 59	·1416
14. 12	·1412
14. 51	·1408
15. 11	·1408
15. 50	·1403
16. 12	·1407
16. 34	·1398
17. 12	·1408
18. 12	·1207
21. 20	·1395
21. 56	·1392
22. 24	·1397
22. 55	·1394
23. 59	·1403
Sept. 4	
0. 0	·1403
0. 13	·1403
0. 34	·1400
0. 44	·1404
2. 4	·1406
2. 22	·1409
2. 35	·1406
3. 6	·1406
3. 14	·1409
3. 26	·1407
3. 56	·1406

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Sept. 2	
0. 0	·03040
2. 14	·03137
3. 26	·03166
9. 19	·03177
12. 52	·03107
18. 45	·03066
21. 0	·03007
23. 59	·03036
Sept. 3	
0. 0	·03036
2. 21	·03085
5. 38	·03112
6. 0	·03100
h m	
8. 59	·03136
12. 41	·03118
12. 52	·03127
13. 23	·03100
14. 9	·03086
15. 12	·03106
19. 57	·03117
23. 59	·03098
Sept. 4	
0. 0	·03098
3. 52	·03164
10. 36	·03202
11. 4	·03194
11. 53	·03202
14. 12	·03222
19. 10	·03241
23. 59	·03226

Greenwich Mean Solar Time.	Readings of Thermometers.	
	Of H. F. Magnet.	Of V. F. Magnet.
h m	°	°
Sept. 2		
0. 0	61·6	63·0
1. 0	61·9	63·7
9. 0	62·1	63·8
21. 0	58·8	59·8
22. 0	59·6	60·6
23. 0	60·0	61·0
Sept. 3		
0. 0	60·5	62·5
1. 0	60·9	62·6
2. 0	61·1	62·9
3. 0	61·2	62·7
h m	°	°
9. 0	61·6	63·0
20. 0	61·4	63·1
21. 0	61·6	62·9
22. 0	61·8	63·0
23. 0	61·8	63·1
Sept. 4		
0. 0	62·1	63·7
1. 0	62·3	64·1
2. 0	62·4	64·1
3. 0	62·6	64·0
9. 0	63·0	64·7
20. 0	63·7	65·
21. 0	63·6	65·1
22. 0	63·6	65·1
23. 0	63·6	65·1

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 4		Sept. 4						
h m	° ′ ″	h m		h m		h m	°	°
5.47	20.23.55	4.20	·1409					
5.57	24. 5	4.34	·1407					
6.10	23.30	4.50	·1409					
6.23	23.30	5. 8	·1414					
6.40	24.20	5.20	·1414					
6.51	25.10	5.36	·1410					
6.58	25.10	6. 0	·1414					
7.21	23.10	6.24	·1411					
7.26	24. 0	6.36	·1414					
7.37	23.30	7.10	·1412					
8. 9	24. 0	7.24	·1415					
8.42	23.10	7.33	·1412					
9.29	23. 0	7.44	·1418					
10.32	19.25	8.52	·1415					
10.46	21. 5	9.43	·1418					
11. 9	21. 0	10. 9	·1416					
11.48	22. 0	10.20	·1419					
12. 8	21.40	10.29	·1417					
13.26	22.40	10.56	·1428					
14. 3	22.10	11.12	·1422					
14.11	22.45	11.56	·1407					
14.22	21.55	12.20	·1411					
14.28	23. 0	13.38	·1407					
14.41	21.55	14.12	·1409					
14.59	22. 5	14.21	·1407					
15.33	21.20	14.33	·1411					
15.59	21.25	14.40	·1407					
16. 6	22. 5	16.25	·1407					
16.27	21.20	18.55	·1403					
16.50	21.40	19.12	·1398					
16.59	21. 0	19.42	·1399					
17.36	21. 0	21. 6	·1392					
18. 3	19.40	21.16	·1394					
18.16	20.25	21.50	·1391					
18.29	19.40	22.24	·1385					
18.38	20.10	23.59	·1397					
18.44	19.50							
19.26	21.10							
19.53	23. 0							
20.21	23.10							
20.40	24.30							
21. 9	24. 0							
21.27	25.25							
22.14	26.25							
22.56	28.55							
23.47	28.55							
23.59	29.10							
Sept. 5		Sept. 5		Sept. 5		Sept. 5		
0. 0	20.29.10	0. 0	·1397	0. 0	·03226	0. 0	64·1	65·5
0.52	29.30	0.33	·1396	3.19	·03263	1. 0	64·5	65·9
3.41	23.55	1.12	·1398	10.12	·03281	2. 0	64·4	66·1
3.45	24.30	1.15	·1397	16.42	·03252	3. 0	64·1	66·2
3.55	23.50	1.51	·1395	21.51	·03206	9. 0	64·2	66·1
4. 6	23.10	2.42	·1399	23.59	·03206	20. 0	63·5	64·5
5.29	23.50	3.11	·1395			21. 0	63·4	64·4
6.25	23.30	3.26	·1397			22. 0	63·5	65·0
6.59	24. 0	3.38	·1395			23. 0	63·5	64·9

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 5		Sept. 5						
h m	° ′ ″	h m		h m		h m	°	°
7.56	20.23.15	3.46	·1401					
8.12	22.15	3.50	·1398					
8.42	23. 0	4. 3	·1399					
9.25	23. 0	4.19	·1404					
9.33	22.35	5.35	·1404					
9.56	22.10	6.44	·1410					
10.21	22.50	7.18	·1407					
10.59	22.10	7.34	·1413					
11.28	22.40	8. 9	·1409					
11.46	21.50	8.26	·1412					
12.53	23.10	8.41	·1409					
13. 4	22.45	9.18	·1410					
13.31	23.40	9.30	·1413					
13.56	22.45	9.43	·1410					
14.14	24.15	10. 5	·1409					
14.33	24. 0	10.26	·1410					
14.41	22.50	10.41	·1413					
15. 9	21.40	10.56	·1409					
15.24	21.40	11.20	·1410					
15.32	22.40	11.36	·1414					
15.58	21.40	12.11	·1408					
16.33	23.50	12.16	·1410					
16.50	23.50	13.43	·1407					
17.17	25.30	14.11	·1407					
17.39	25.15	14.26	·1411					
17.51	25.50	15.35	·1405					
18.23	24.10	15.43	·1407					
18.41	24. 0	16.12	·1403					
19. 2	22.30	16.24	·1399					
19.24	22. 5	17.12	·1404					
19.53	22.55	17.43	·1406					
20.32	22.10	19.11	·1417					
21.14	22.20	19.42	·1415					
23.59	28.40	20.14	·1416					
		21.38	·1408					
		23.59	·1404					
Sept. 6		Sept. 6		Sept. 6		Sept. 6		
0. 0	20.28.40	0. 0	·1404	0. 0	·03206	0. 0	63·6	65·0
0. 7	28.20	0.54	·1400	2.34	·03257	1. 0	64·1	65·1
0.55	28.10	1.26	·1396	7.19	·03245	3. 0	64·1	65·2
1.53	25.30	1.43	·1397	12.26	·03247	7.25	64·1	65·6
2.25	24.50	2. 8	·1402	12.59	·03232	9. 0	63·6	65·0
3. 2	25. 0	2.56	·1405	13.34	·03226	20. 0	63·4	64·3
3.13	24.20	3.12	·1401	14.25	·03203	21. 0	63·4	64·3
4. 7	24.20	4.41	·1401	16.43	·03214	22. 0	63·5	64·3
4.41	23.45	5.16	·1406	21.56	·03184	23. 0	63·7	64·6
5.12	24. 5	7.12	·1409	23.11	·03198			
5.47	23.35	7.27	·1415	23.59	·03193			
7.51	23.35	7.36	·1412					
8.36	22.50	8.54	·1413					
11.34	23.35	9.10	·1410					
12.24	22.30	9.27	·1414					
12.39	23.55	11.20	·1413					
13. 4	21.15	11.39	·1410					
13.22	20.55	12. 0	·1412					
13.52	20. 0	12.11	·1415					
14.23	21.30	12.25	·1412					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Sept. 6		Sept. 6						
h m	° ′ ″	h m		h m		h m	°	°
14. 42	20. 19. 40	12. 35	·1416					
15. 3	19. 10	12. 54	·1418					
15. 28	17. 30	13. 26	·1414					
17. 6	22. 50	13. 49	·1417					
17. 23	21. 55	14. 12	·1420					
17. 35	22. 45	14. 25	·1417					
17. 51	23. 0	15. 7	·1410					
18. 29:	20. 0	15. 19	·1409					
19. 13	21. 20	15. 57	·1401					
19. 26	20. 55	16. 55	·1405					
19. 38	21. 30	17. 36	·1405					
19. 52	21. 5	18. 12	·1413					
19. 59	22. 0	19. 20	·1409					
20. 24	21. 30	20. 26	·1403					
20. 40	23. 5	20. 39	·1406					
21. 4	23. 0	21. 42	·1404					
22. 14:	27. 50	22. 11	·1391					
22. 41	27. 20	22. 45	·1398					
23. 59	28. 0	23. 11	·1405					
		23. 59	·1410					
Sept. 7		Sept. 7		Sept. 7		Sept. 7		
0. 0	20. 28. 0	0. 0	·1410	0. 0	·03193	0. 0	63·7	64·6
1. 6	28. 20	0. 42	·1410	0. 42	·03193	1. 0	63·8	64·8
1. 35	27. 20	0. 59	·1409	4. 53	·03252	2. 0	64·3	65·4
1. 41	27. 30	4. 7	·1409	6. 49	·03295	3. 0	64·3	65·5
3. 11	25. 25	4. 20	·1417	7. 12	·03276	9. 0	64·1	65·5
3. 53	25. 5	4. 38	·1412	7. 42	·03294	20. 0	63·6	64·8
4. 3	24. 25	4. 59	·1417	11. 45	·03257	21. 0	63·7	64·9
4. 13	25. 15	5. 35	·1404	12. 59	·03212	22. 0	63·7	65·0
4. 24	24. 55	5. 54	·1401	17. 40	·03236	23. 0	63·6	64·9
4. 58	25. 45	5. 59	·1406	19. 42	·03232			
5. 8	25. 35	6. 14	·1405	21. 19	·03200			
5. 22	26. 25	6. 28	·1413	23. 59	·03196			
5. 40	25. 45	6. 52	·1424					
5. 56	26. 5	7. 13	·1394					
6. 4	26. 50	7. 18	·1396					
6. 11	25. 25	7. 27	·1384					
6. 13	25. 25	7. 49	·1396					
6. 32	20. 30	8. 14	·1385					
6. 39	19. 30	8. 50	·1394					
6. 44	19. 55	8. 55	·1392					
7. 9	26. 20	9. 54	·1406					
7. 21	21. 30	10. 18	·1407					
7. 24	21. 30	10. 30	·1413					
7. 42	16. 0	10. 42	·1408					
8. 11	19. 55	10. 54	·1410					
8. 33	19. 15	11. 2	·1407					
9. 35	22. 0	11. 26	·1407					
10. 38	23. 0	11. 41	·1410					
10. 58	21. 45	12. 6	·1407					
11. 21	22. 25	12. 44	·1420					
11. 32	22. 0	13. 14	·1407					
11. 40	23. 25	13. 29	·1412					
11. 53	24. 0	13. 41	·1408					
12. 3	26. 30	14. 6	·1409					
12. 11	26. 45	14. 39	·1405					
12. 27	25. 55	14. 57	·1410					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V.F. Magnet.
Sept. 7		Sept. 7						
h m	° ′ ″	h m		h m		h m	°	°
12. 41	20. 26. 30	15. 36	·1402					
12. 47	27. 10	15. 48	·1404					
12. 55	26. 40	17. 23	·1401					
13. 6	25. 10	18. 26	·1403					
13. 26	24. 0	18. 44	·1398					
13. 36	24. 30	20. 44	·1400					
13. 54	23. 30	21. 37	·1392					
14. 8	23. 30	21. 56	·1400					
14. 43	21. 10	22. 19	·1390					
14. 56	21. 30	22. 30	·1392					
15. 4	21. 0	23. 15	·1382					
15. 28	20. 25	23. 42	·1390					
15. 53	21. 0	23. 59	·1387					
16. 21:	19. 45							
16. 33	20. 10							
16. 43	20. 0							
17. 13	20. 55							
17. 33	20. 0							
17. 42	20. 35							
17. 58	20. 10							
18. 19	21. 40							
18. 25	21. 15							
18. 36	21. 55							
18. 44	20. 10							
18. 58	20. 0							
19. 13	21. 0							
20. 4	21. 30							
20. 41	23. 30							
20. 45	23. 10							
	***							
21. 43	25. 20							
22. 2	27. 55							
22. 18	27. 50							
22. 26	29. 0							
22. 52	28. 50							
23. 27	32. 5							
23. 59	35. 30							
Sept. 8		Sept. 8		Sept. 8		Sept. 8		
0. 0	20. 35. 30	0. 0	·1387	0. 0	·03196	0. 0	63·8	65·1
0. 39	32. 50	0. 27	·1394	2. 5	·03247	1. 0	64·1	65·1
0. 45	32. 50	1. 5	·1402	5. 13	·03253	2. 0	64·1	65·0
1. 24	29. 20	1. 9	·1401	6. 15	·03260	3. 0	64·1	65·0
1. 51	28. 0	1. 41	·1406	6. 42	·03252	9. 0	63·7	64·9
2. 9:	28. 35	2. 0	·1415	7. 20	·03266	22. 0	63·1	64·5
2. 39	26. 55	2. 36	·1404	7. 40	·03250			
3. 25	25. 25	3. 9	·1409	7. 52	·03250			
3. 39	26. 0	3. 24	·1407	7. 57	·03235			
4. 11	25. 15	3. 38	·1417	9. 56	·03224			
4. 17	25. 55	3. 50	·1412	10. 11	·03218			
4. 32	25. 0	4. 11	·1399	10. 26	·03197			
4. 51	25. 20	4. 15	·1406	10. 39	·03201			
5. 26	22. 35	4. 28	·1396	11. 4	·03180			
5. 57	22. 55	4. 45	·1397	12. 26	·03193			
6. 11	24. 30	5. 11	·1394	12. 56	·03158			
6. 17	24. 30	5. 24	·1397	14. 34	·03192			
6. 38	20. 30	5. 55	·1399	15. 26	·03200			
6. 56	8. 0	6. 14	·1406	17. 25	·03194			

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Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 8		Sept. 8		Sept. 8				
h m	° ′ ″	h m		h m		h m	°	°
7. 3	20. 6. 0	6. 44	·1392	18. 12	·03163			
7. 25	17. 0	7. 11	·1411	18. 56	·03172			
7. 27	17. 10	7. 19	·1426	19. 28	·03154			
7. 46	22. 55	7. 25	·1424	20. 39	·03143			
7. 57	19. 30	7. 34	·1414	21. 45	·03164			
8. 7	19. 15	7. 41	·1416	22. 43	·03167			
8. 33	21. 40	7. 57	·1400	23. 4	·03150			
8. 51	20. 20	8. 9	·1403		***			
9. 9	20. 45	8. 27	·1404	23. 59	·03176			
9. 17	20. 30	8. 41	·1399					
9. 28	21. 10	9. 35	·1400					
9. 41	20. 50	9. 43	·1399					
9. 52	22. 0	9. 57	·1409					
10. 24	13. 40	10. 11	·1426					
10. 43	18. 20	10. 24	·1421					
10. 57	16. 15	10. 41	·1434					
11. 6	16. 30	11. 3	·1413					
11. 18	19. 0	11. 41	·1399					
11. 51	15. 50	12. 24	·1394					
12. 25	29. 45	12. 43	·1403					
13. 6	24. 0	12. 55	·1401					
13. 21	22. 30	13. 22	·1413					
13. 34	22. 30	13. 40	·1408					
13. 44	21. 30	14. 16	·1407					
13. 56	21. 50	14. 31	·1403					
14. 25:	20. 10	15. 16	·1403					
15. 9	22. 55	16. 10	·1413					
15. 12	22. 30	16. 41	·1410					
15. 45	23. 55	17. 11	·1401					
15. 59	22. 55	17. 43	·1415					
16. 10	21. 50	18. 15	·1388					
16. 26	20. 45	18. 43	·1389					
16. 33	21. 40	19. 11	·1409					
16. 42	21. 15	19. 35	·1392					
16. 51	22. 50	20. 11	·1405					
17. 6	25. 30	20. 20	·1409					
17. 25	28. 0	20. 34	·1402					
17. 36	30. 20	20. 43	·1399					
17. 40	28. 40	21. 13	·1398					
18. 12	34. 5	21. 25	·1402					
18. 19	33. 50	21. 35	·1398					
18. 27	36. 0	21. 44	·1405					
18. 52	34. 30	22. 12	·1396					
19. 3	37. 0	22. 36	·1398					
19. 14	36. 30	22. 45	·1413					
19. 33	36. 0	23. 11	·1393					
	***	23. 33	·1405					
19. 58	33. 40	23. 40	·1394					
	***	23. 47	·1397					
20. 20	32. 0	23. 59	·1383					
20. 38	27. 50							
20. 54	24. 20							
20. 58	24. 15							
21. 3	23. 25							
21. 14	23. 25							
21. 28	24. 30							
21. 32	23. 10							
21. 38	24. 40							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 8								
h m	° ′ ″	h m		h m		h m	°	°
21. 56	20. 27. 30							
22. 21	26. 10							
22. 26	26. 45							
22. 35	26. 15							
22. 52	31. 0							
23. 4	29. 25							
23. 18	28. 55							
23. 25	29. 10							
23. 34	32. 10							
23. 40	31. 25							
23. 52	32. 30							
23. 59	31. 25							
Sept. 9		Sept. 9		Sept. 9		Sept. 9		
0. 0	20. 31. 25	0. 0	·1383	0. 0	·03176	1. 0	63·7	65·0
0. 20	32. 20	0. 20	·1379	1. 57	·03240	9. 15	63·7	64·8
0. 26	35. 0	0. 40	·1372	2. 7	·03237	20. 0	63·4	64·2
0. 33	34. 20	0. 49	·1381	2. 28	·03272	21. 0	63·6	64·1
0. 58	34. 0	1. 6	·1381		***	22. 0	63·7	65·3
1. 5	32. 45	1. 12	·1389	2. 55	·03300	23. 0	63·8	65·6
	***	1. 22	·1385	3. 11	·03288			
1. 17	32. 20	1. 45	·1397	3. 21	·03308			
1. 26	30. 50	2. 5	·1378	3. 28	·03297			
1. 42	31. 30	2. 20	·1396	3. 38	·03308			
2. 1	34. 40	2. 41	·1393	3. 43	·03300			
2. 13	32. 10	2. 54	·1400	3. 54	·03316			
2. 22	32. 10	3. 7	·1386	4. 6	·03318			
2. 26	33. 20	3. 18	·1389	4. 12	·03300			
2. 39	28. 10	3. 20	·1384	4. 22	·03317			
2. 41	28. 15	3. 27	·1393	4. 54	·03322			
2. 46	26. 50	3. 40	·1384		***			
2. 55	29. 30	3. 56	·1406	5. 19	·03366			
3. 4	29. 30	4. 9	·1379	5. 38	·03338			
3. 9	27. 10	4. 20	·1396	5. 42	·03300			
3. 17	28. 0	4. 24	·1393	6. 56	·03260			
3. 26	26. 10	4. 34	·1399	6. 59	·03264			
3. 36	28. 15	4. 51	·1372	9. 42	·03232			
	***	4. 57	·1366	9. 58	·03212			
3. 55	26. 40	5. 4	·1364	10. 9	·03200			
4. 4	28. 10	5. 11	·1382	10. 20	·03177			
4. 11	23. 50	5. 27	·1454	10. 32	·03177			
4. 26	26. 25	5. 34	·1466	10. 42	·03188			
4. 36	22. 15	5. 36	·1456	12. 55	·03202			
4. 48	28. 15	5. 43	·1421	14. 11	·03180			
4. 55	27. 30	5. 50	·1423	16. 51	·03203			
5. 10	12. 20	5. 55	·1416	19. 56	·03218			
5. 14	20. 11. 25	6. 23	·1408	22. 14	·03180			
5. 28	19. 51. 30	6. 30	·1409	22. 53	·03193			
5. 42	20. 13. 10	6. 43	·1392	23. 59	·03194			
5. 51	9. 15	6. 53	·1387					
5. 55	11. 50	7. 7	·1397					
6. 1	10. 20	7. 19	·1400					
6. 40	22. 25	7. 42	·1401					
6. 53	21. 55	7. 55	·1396					
6. 57	20. 30	8. 10	·1401					
7. 11	21. 20	8. 25	·1397					
7. 32	24. 0	8. 48	·1401					
7. 50	23. 55	9. 10	·1413					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 9		Sept. 9						
h m	° ′ ″	h m		h m		h m	°	°
7. 56	20. 23. 0	9. 13	·1405					
8. 16	23. 45	9. 26	·1411					
8. 41	22. 10	9. 43	·1440					
8. 56	13. 20	9. 55	·1431					
9. 12	16. 40	10. 6	·1432					
9. 22	12. 55	10. 12	·1412					
9. 40	12. 40	10. 21	·1403					
9. 47	16. 30	10. 32	·1399					
9. 55	15. 10	10. 53	·1387					
10. 4	18. 5	11. 40	·1396					
10. 13	11. 0	12. 10	·1397					
10. 23	10. 30	12. 19	·1393					
10. 33	17. 10	12. 52	·1400					
10. 41	17. 10	13. 6	·1399					
10. 55	19. 15	13. 25	·1395					
11. 2	21. 0	13. 49	·1402					
	***	14. 8	·1397					
12. 11	22. 30	14. 25	·1402					
12. 27	25. 45	14. 43	·1403					
12. 54	24. 15	14. 55	·1406					
13. 3	26. 30	15. 3	·1400					
13. 9	26. 15	15. 20	·1397					
13. 38	28. 30	15. 26	·1400					
13. 44	30. 20	15. 36	·1395					
14. 9	29. 55	15. 58	·1399					
14. 23	28. 0	16. 12	·1396					
14. 28	28. 0	16. 43	·1400					
15. 13	22. 25		***					
15. 34	20. 40	18. 3	·1393					
15. 39	22. 5	18. 13	·1397					
15. 55	20. 40	18. 19	·1392					
16. 15	21. 20	18. 32	·1394					
16. 41	21. 10	19. 24	·1389					
16. 55	21. 40	19. 36	·1393					
17.⁏ 4	20. 30	20. 2	·1376					
17. 55	20. 45	20. 12	·1378					
18. 8	21. 30	20. 29	·1370					
18. 18	20. 50	21. 26	·1383					
18. 28	22. 15	21. 40	·1378					
18. 37	20. 30	21. 58	·1371					
18. 43	20. 25	22. 12	·1375					
18. 53	21. 30	22. 19	·1372					
19. 13	20. 45	22. 29	·1379					
19. 28	21. 35	22. 42	·1379					
19. 36	21. 20	22. 56	·1385					
19. 41	18. 35	23. 12	·1387					
19. 42	20. 40	23. 21	·1380					
19. 45	20. 30	23. 25	·1374					
19. 51	22. 15	23. 47	·1395					
19. 58	22. 0		(†)					
	***							
20. 30	25. 20							
21. 7	24. 10							
21. 38	26. 55							
21. 43	28. 5							
22. 9	28. 15							
22. 12	27. 40							
22. 26	28. 10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 9								
h m	° ′ ″	h m		h m		h m	°	°
22. 36	20. 27. 40							
22. 51	29. 0							
23. 11	29. 30							
23. 24	29. 10							
23. 35	29. 30							
23. 41	31. 20							
23. 48	31. 30							
23. 59	27. 10							
Sept. 10		Sept. 10		Sept. 10		Sept. 10		
0. 0	20. 27. 10		(†)	0. 0	·03194	0. 0	64 ·0	65 ·7
0. 52	27. 20	0. 37	·1396	1. 26	·03212	1. 0	64 ·3	66 ·2
1. 12	28. 55	1. 12	·1400	2. 55	·03242	2. 0	64 ·2	66 ·1
1. 24	28. 55	1. 23	·1397	3. 39	·03242	3. 0	64 ·1	66 ·2
1. 56	27. 15	1. 45	·1399	3. 46	·03260	9. 0	64 ·0	65 ·7
2. 5	27. 50	1. 57	·1394	4. 24	·03273	20. 0	62 ·7	63 ·4
2. 28	27. 45	2. 44	·1398	4. 46	·03266	21. 0	62 ·5	63 ·1
2. 59	28. 30	3. 11	·1393	5. 14	·03277	22. 30	62 ·5	64 ·0
3. 9	27. 55	3. 20	·1396	5. 40	·03267	23. 0	62 ·6	64 ·0
3. 26	28. 30	3. 41	·1386	5. 53	·03277			
3. 34	28. 10	3. 52	·1397	5. 57	·03276			
3. 51	21. 55	4. 12	·1394	6. 0	·03296			
3. 55	19. 50	4. 24	·1401	6. 21	·03263			
4. 11	20. 5	4. 29	·1396	6. 38	·03254			
4. 26	22. 30	4. 39	·1397	6. 43	·03273			
4. 44	23. 30	4. 44	·1390	7. 3	·03252			
4. 58	22. 5	4. 57	·1396	7. 12	·03252			
5. 11	23. 30	5. 21	·1400	8. 4	·03228			
5. 14	23. 30	5. 33	·1392	11. 7	·03203			
5. 36	25. 15	5. 41	·1386	11. 12	·03222			
5. 41	23. 0	5. 44	·1388	11. 41	·03160			
5. 53	22. 20	5. 57	·1399	12. 21	·03168			
6. 2	16. 15	6. 9	·1424	13. 10	·03160			
6. 13	23. 15	6. 24	·1399	15. 24	·03184			
6. 24	20. 0	6. 26	·1401	16. 14	·03173			
6. 28	19. 40	6. 39	·1383	16. 42	·03180			
6. 43	7. 20	6. 50	·1414	17. 53	·03162			
6. 54	17. 20	7. 0	·1396	18. 20	·03174			
7. 13	15. 0	7. 12	·1392	23. 59	·03137			
7. 24	18. 5	7. 25	·1400					
7. 36	16. 15	7. 35	·1399					
7. 54	23. 30	7. 44	·1407					
8. 8	22. 15	8. 11	·1394					
8. 12	20. 20	8. 12	·1397					
8. 43	22. 30	8. 24	·1401					
9. 56	23. 45	9. 57	·1403					
10. 11	23. 0	10. 12	·1407					
10. 23	21. 40	11. 12	·1402					
10. 41	20. 25	11. 20	·1429					
10. 59	20. 35	11. 38	·1417					
11. 17	33. 50	11. 53	·1405					
11. 53	20. 0	12. 8	·1408					
11. 57	20. 40	12. 17	·1405					
12. 4	20. 30	12. 39	·1419					
12. 12	19. 35	13. 30	·1407					
12. 42	22. 10	13. 41	·1409					
13. 29	20. 45	14. 33	·1397					
13. 51	20. 20	14. 41	·1400					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁏ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 10		Sept. 10						
h m	° ′ ″	h m		h m		h m	°	°
14. 33	20. 22. 30	14. 51	·1397					
14. 44	21. 0	15. 24	·1397					
14. 53	21. 35	15. 34	·1400					
15. 9	21. 5	15. 43	·1397					
15. 23	23. 45	16. 0	·1400					
15. 28	23. 25	16. 26	·1385					
15. 33	23. 55	16. 55	·1396					
15. 51	22. 30	17. 27	·1401					
16. 17	24. 30	18. 4	·1383					
16. 39	24. 0	18. 42	·1394					
16. 47	26. 5	18. 55	·1391					
17. 9	25. 0	18. 58	·1395					
17. 26:	23. 15	19. 24	·1384					
17. 43	24. 25	20. 11	·1388					
18. 7	23. 0		***					
18. 21	23. 30	22. 29	·1387					
18. 26	22. 50	23. 24	·1393					
18. 41	23. 55	23. 40	·1399					
18. 51	22. 30	23. 44	·1395					
18. 58	23. 0	23. 59	·1396					
19. 8	22. 0							
19. 14	21. 55							
19. 27	20. 20							
19. 38	20. 10							
19. 42	20. 40							
19. 48	19. 55							
20. 27	20. 30							
21. 43	24. 0							
21. 52	25. 0							
22. 38	26. 50							
23. 26	29. 30							
23. 28	30. 5							
	***							
23. 59	28. 50							
Sept. 11		Sept. 11		Sept. 11		Sept. 11		
0. 0	20. 28. 50	0. 0	·1396	0. 0	·03137	0. 0	62·6	64·0
0. 21	29. 30	0. 49	·1405	2. 39	·03176	1. 0	62·8	64·0
0. 27	28. 55	1. 6	·1407	8. 56	·03168	2. 0	62·8	64·0
0. 40	29. 30	1. 24	·1409	9. 11	·03158	3. 0	62·7	64·0
1. 26	28. 20	2. 21	·1408	9. 25	·03178	9. 0	62·0	63·8
2. 14:	26. 20	2. 30	·1414	9. 55	·03140	20. 0	61·6	62·5
2. 28	27. 20	2. 44	·1412	11. 15	·03156	21. 0	61·7	62·5
2. 38	26. 50	3. 10	·1404	11. 43	·03141	22. 0	61·6	62·3
2. 44	26. 55		***	12. 16	·03147	23. 0	61·6	62·3
2. 59	25. 45	3. 37	·1401	15. 52	·03135			
3. 57	25. 0	3. 49	·1404	18. 25	·03106			
4. 8	25. 20	4. 2	·1403	19. 12	·03109			
5. 12	24. 0	4. 18	·1406	20. 23	·03086			
6. 4	23. 35	4. 43	·1408	23. 26	·03063			
6. 23	22. 50	4. 54	·1404	23. 59	·03068			
6. 58:	23. 25	5. 13	·1407					
7. 16	22. 30	5. 22	·1406					
8. 13	23. 10	5. 40	·1409					
8. 42	22. 5	6. 13	·1408					
8. 54	17. 10	6. 33	·1413					
9. 8	18. 45	6. 54	·1408					
9. 21	20. 10	7. 22	·1412					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 11		Sept. 11						
h m	° ′ ″	h m		h m		h m	°	°
9. 34	20. 25. 30	7. 47	·1408					
10. 6	20. 50	8. 51	·1410					
10. 35	22. 10	9. 6	·1425					
10. 47	21. 40	9. 18	·1414					
11. 4	21. 45	9. 24	·1405					
11. 14	23. 40	9. 40	·1422					
11. 23	23. 20	10. 12	·1405					
11. 39	20. 55	10. 44	·1409					
11. 54	21. 10	11. 11	·1407					
12. 9	22. 30	11. 22	·1409					
12. 27	22. 30	11. 37	·1418					
12. 58	24. 10	12. 13	·1405					
13. 29:	23. 30	12. 51	·1408					
13. 42	24. 30	13. 38	·1408					
14. 15	24. 0	14. 25	·1410					
14. 53:	22. 30	14. 49	·1406					
15. 21	24. 5	15. 20	·1405					
15. 41	23. 20	15. 42	·1408					
15. 55	23. 30	15. 55	·1406					
15. 58	24. 20	16. 14	·1407					
16. 38	24. 55	16. 26	·1404					
16. 51	25. 40	16. 43	·1407					
17. 3	25. 20	16. 57	·1405					
17. 26	27. 45	17. 20	·1410					
17. 41	27. 20	17. 44	·1413					
17. 53	28. 20	18. 19	·1395					
18. 9	29. 5	18. 54	·1396					
18. 21	28. 25	19. 20	·1399					
18. 41	25. 55	19. 41	·1403					
18. 54	27. 40	19. 56	·1398					
19. 8	27. 35	21. 0	·1394					
19. 17	28. 25	21. 11	·1390					
19. 53	27. 20		***					
20. 3	27. 50	21. 55	·1388					
20. 12	26. 40	22. 11	·1383					
20. 17	26. 40	22. 36	·1390					
20. 31	28. 25	22. 55	·1389					
20. 42	28. 30	23. 12	·1397					
20. 54	27. 55	23. 59	·1397					
21. 11	27. 35							
21. 17	29. 10							
21. 29	27. 40							
21. 47	28. 5							
21. 57	28. 5							
22. 10	29. 25							
22. 32	29. 30							
22. 43	30. 10							
22. 59	30. 10							
23. 25	31. 30							
23. 55	31. 10							
23. 59	30. 25							
Sept. 12		Sept. 12		Sept. 12		Sept. 12		
0. 0	20. 30. 25	0. 0	·1397	0. 0	·03068	0. 0	61·7	62·5
0. 13	29. 30	0. 20	·1408	2. 57	·03137	1. 0	62·1	63·0
0. 39	31. 20	0. 41	·1406	5. 3	·03127	2. 0	62·0	63·9
0. 55	31. 55	0. 58	·1409	5. 42	·03138	3. 0	62·1	62·[illegible]
1. 11	30. 55	1. 19	·1401	10. 33	·03097	9. 0	62·1	62·5

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.	Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 12		Sept. 12		Sept. 12		Sept. 12			Sept. 12		Sept. 12						
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
1. 43	20. 33. 5	1. 38	·1400	11. 41	·03100	20. 0	62·1	62·8	20. 17	20. 22. 40	22. 22	·1380					
2. 1	30. 55	1. 43	·1403	12. 41	·03082	21. 0	62·0	63·1	20. 24	20. 10	22. 41	·1374					
2. 10	27. 50	2. 12	·1396	13. 10	·03085	22. 0	62·0	63·0	20. 28	22. 30	23. 6	·1399					
2. 16	26. 30	2. 21	·1399	13. 26	·03056	23. 0	62·2	63·7	20. 48	23. 50	23. 25	·1372					
2. 22	27. 5	2. 30	·1393	13. 55	·03020				21. 0	26. 10	23. 41	·1381					
2. 39	24. 0	2. 54	·1398	14. 40	·03044					***	23. 55	·1363					
2. 53	25. 40	3. 25	·1410	15. 0	·03040				21. 36	27. 55	23. 59	·1367					
2. 58	25. 20	3. 50	·1405	15. 21	·03056				21. 41	26. 30							
3. 32	26. 30	4. 9	·1407	16. 3	·03060				22. 13	30. 35							
3. 41	26. 10	4. 25	·1401		·03079				22. 26	30. 35							
3. 58	26. 55	4. 57	·1405	17. 24	·03087				22. 36	31. 45							
4. 23	26. 50	5. 6	·1411	18. 22	·03077				22. 40	30. 45							
4. 56	24. 45	5. 27	·1400	19. 42	·03084				22. 51	31. 30							
5. 1	23. 40	5. 52	·1410	20. 57	·03072				22. 56	33. 35							
5. 25	21. 55	6. 24	·1408	21. 11	·03081				23. 7	33. 10							
5. 47	23. 45	6. 48	·1412	22. 9	·03063				23. 21	33. 55							
5. 57	23. 0	7. 19	·1410	22. 41	·03078				23. 26	35. 20							
6. 11	23. 20	9. 25	·1412		***				23. 39	35. 0							
6. 39	22. 55	9. 44	·1417	23. 54	·03074				23. 43	37. 20							
7. 55	22. 55	10. 27	·1418	23. 59	·03083					***							
8. 14	22. 15	10. 49	·1415						23. 59	32. 40							
9. 21	22. 15	11. 11	·1414														
9. 29	21. 30	11. 33	·1416						Sept. 13		Sept. 13		Sept. 13		Sept. 13		
9. 39	21. 55	11. 39	·1419						0. 0	20. 32. 20	0. 0	·1367	0. 0	·03083	0. 0	62·5	64·0
9. 53	21. 20	11. 57	·1418						0. 9	31. 40	0. 21	·1388	0. 44	·03116	1. 0	62·9	64·2
10. 8	22. 10	12. 6	·1421						0. 12	32. 30	0. 26	·1393	2. 7	·03127	3. 0	62·8	64·3
10. 41	21. 10	12. 27	·1423						0. 36	28. 10	0. 41	·1400	2. 15	·03148	9. 0	62·6	64·0
11. 16	21. 55	12. 54	·1418						0. 40	29. 40	0. 57	·1397	2. 37	·03135	20. 0	62·4	63·3
11. 25	22. 40	13. 11	·1420						0. 56	28. 50	1. 11	·1399	2. 41	·03152	21. 0	62·6	63·3
11. 28	22. 5	13. 33	·1438						1. 22	32. 0	1. 22	·1409	3. 6	·03142	22. 0	62·4	63·0
11. 43	23. 25	13. 56	·1438						1. 28	31. 30		***	3. 12	·03168	23. 0	62·5	63·1
11. 55	23. 10	14. 3	·1433						1. 33	33. 10	1. 54	·1394	3. 28	·03178			
11. 59	23. 40	14. 11	·1412						1. 40	32. 0	2. 2	·1397		(†)			
12. 38	19. 50	14. 18	·1419						1. 54	32. 10	2. 11	·1395	8. 26	·03140			
13. 9	30. 10	14. 23	·1416						1. 57	32. 55	2. 17	·1409	9. 11	·03119			
13. 26	28. 5	14. 27	·1423						2. 8	31. 55	2. 26	·1396	9. 18	·03132			
13. 51	26. 55	14. 43	·1418						2. 14	33. 25	2. 41	·1392	9. 49	·03100			
13. 56	23. 0	14. 56	·1419						2. 26	32. 15	2. 51	·1402	10. 12	·03108			
14. 11	19. 30	15. 17	·1411						2. 41	31. 40	3. 10	·1373	10. 40	·03100			
14. 53	16. 40	15. 43	·1413						2. 47	34. 0	3. 14	·1386	11. 17	·03121			
15. 7	13. 40	16. 0	·1406						3. 1:	29. 30	3. 41	·1402	13. 52	·03115			
15. 14	15. 20	16. 12	·1395						3. 11	24. 0	3. 43	·1398	15. 9	·03128			
15. 26	14. 50	16. 30	·1390						3. 21	23. 40	4. 9	·1416	17. 45	·03110			
15. 36	16. 30	16. 54	·1389						3. 26	22. 25	4. 12	·1412	19. 5	·03122			
15. 43	16. 20	17. 13	·1401						3. 40	23. 30	4. 20	·1397	23. 0	·03088			
16. 13	22. 45	17. 39	·1415						3. 54	26. 20	4. 27	·1399	23. 59	·03097			
16. 20	22. 45	17. 54	·1425						4. 6	27. 20	4. 41	·1386					
16. 39	25. 20	18. 48	·1414						4. 9	28. 30	4. 55	·1379					
16. 57	24. 5	18. 56	·1405						4. 22	25. 0	5. 4	·1399					
	***	19. 23	·1400						4. 33	26. 30	5. 12	·1393					
17. 26	25. 50	19. 44	·1405						4. 42	26. 10	5. 26	·1393					
17. 32	25. 0	19. 56	·1406						4. 56	21. 20	5. 38	·1398					
17. 51	24. 50	20. 11	·1400							***	5. 49	·1389					
17. 57	23. 0	20. 50	·1396						5. 33	26. 20	6. 6	·1410					
18. 53	19. 50	21. 10	·1386						5. 54	13. 40	6. 19	·1427					
19. 9	20. 30	21. 21	·1380						5. 57	14. 10	6. 36	·1416					
19. 13	21. 45	21. 55	·1379						6. 11	10. 45	6. 45	·1400					
19. 28	20. 55	22. 12	·1372						6. 17	11. 50	7. 6	·1426					
	***																

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declina-tion.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 13		Sept. 13						
h m	° ′ ″	h m		h m		h m	°	°
6. 39	20. 21. 30	7. 25	·1404					
6. 54	10. 55	7. 41	·1409					
7. 11	15. 10	7. 52	·1399					
7. 15	15. 30	8. 6	·1406					
7. 24	18. 15	8. 8	·1400					
7. 29	17. 40	8. 22	·1418					
7. 43	20. 10	8. 38	·1423					
7. 56	17. 0	8. 58	·1412					
8. 8	17. 15	9. 12	·1399					
8. 23	14. 30	9. 19	·1397					
8. 43	18. 0	9. 24	·1417					
8. 56	18. 10	9. 42	·1419					
9. 8	19. 40	9. 57	·1409					
9. 17	18. 10	10. 11	·1419					
9. 37	26. 35	10. 22	·1425					
9. 52	22. 10	10. 44	·1412					
10. 9	15. 50	11. 25	·1397					
10. 27	18. 55	12. 12	·1406					
10. 43	17. 0	12. 34	·1402					
10. 58	18. 35	13. 27	·1407					
11. 13	19. 10	13. 42	·1403					
11. 34	23. 20	13. 55	·1405					
11. 53	23. 40	14. 13	·1399					
12. 10	24. 55	14. 21	·1403					
12. 21	23. 20	14. 37	·1399					
12. 33	23. 30	14. 42	·1402					
12. 42	23. 25	14. 55	·1399					
12. 49	24. 30	15. 11	·1397					
13. 0	23. 20	15. 23	·1403					
13. 11	24. 20	15. 41	·1403					
13. 20	23. 25	15. 54	·1398					
13. 26	24. 0	16. 27	·1404					
	* * *	16. 41	·1399					
14. 10	21. 40	16. 51	·1393					
	* * *	17. 12	·1394					
14. 43	23. 40	17. 42	·1408					
15. 4	23. 0	18. 3	·1404					
15. 11	24. 0	19. 6	·1404					
15. 22	23. 40	20. 11	·1398					
15. 33	24. 40	20. 50	·1389					
15. 42	22. 40	21. 0	·1385					
15. 55	22. 30	21. 20	·1385					
	* * *	21. 43	·1382					
16. 28	25. 20	22. 26	·1389					
16. 39	25. 5	22. 55	·1396					
16. 48	25. 55	23. 27	·1391					
16. 59	25. 15	23. 56	·1384					
17. 13	27. 0	23. 59	·1368					
17. 23	26. 45							
18. 17	22. 0							
18. 36	22. 25							
	* * *							
19. 38	20. 35							
	* * *							
20. 28	21. 50							
20. 36	21. 0							
21. 42	22. 40							
22. 41	25. 30							

Greenwich Mean Solar Time.	Western Declina-tion.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 13								
h m	° ′ ″	h m		h m		h m	°	°
22. 57	20. 29. 10							
23. 28	30. 10							
23. 40	29. 40							
23. 55	30. 40							
23. 59	29. 45							
Sept. 14		Sept. 14		Sept. 14		Sept. 14		
0. 0	20. 29. 45	0. 0	·1368	0. 0	·03097	0. 0	62 ·6	63 ·3
0. 23	32. 0	0. 26	·1369	3. 4	·03138	1. 0	62 ·9	63 ·5
0. 32	31. 0	0. 35	·1376	8. 25	·03146	2. 0	62 ·7	63 ·6
0. 39	31. 40	0. 41	·1381	8. 57	·03125	3. 0	63 ·1	64 ·0
0. 53	33. 10	1. 4	·1390	10. 45	·03120	9. 0	62 ·7	64 ·3
0. 58	32. 5	1. 12	·1382	11. 50	·03103	20. 0	61 ·7	62 ·5
1. 4	32. 50	1. 34	·1388	16. 12	·03098	21. 0	61 ·5	62 ·1
1. 13	29. 30	1. 41	·1395	18. 4	·03092	22. 0	61 ·5	62 ·5
1. 34	28. 10	2. 10	·1400	18. 54	·03066	23. 0	61 ·5	62 ·5
2. 11	27. 30	2. 20	·1397	20. 29	·03068			
2. 34	27. 30	2. 50	·1406	21. 14	·03057			
3. 43	24. 30	3. 21	·1400	22. 11	·03066			
4. 8	24. 25	3. 25	·1404	23. 59	·03067			
4. 51	22. 55	3. 55	·1401					
5. 9	23. 10	4. 11	·1402					
5. 43	22. 15	4. 37	·1397					
5. 56	22. 40	5. 12	·1403					
6. 21	21. 55	5. 55	·1400					
7. 11	23. 40	6. 19	·1405					
7. 55	21. 40	6. 22	·1404					
8. 6	22. 15	7. 5	·1404					
8. 14	19. 40	7. 14	·1408					
8. 33	22. 10	7. 41	·1409					
8. 48	22. 0	7. 54	·1406					
9. 6	23. 0	8. 12	·1408					
9. 19	22. 5	8. 36	·1430					
9. 26	22. 10	8. 41	·1423					
9. 56	20. 0	9. 18	·1406					
10. 14	19. 30	9. 30	·1408					
10. 37	20. 40	10. 14	·1402					
11. 4	24. 5	10. 28	·1405					
11. 25	22. 30	11. 15	·1406					
11. 39	24. 20	11. 42	·1409					
12. 11	22. 50	11. 58	·1406					
12. 25	23. 30	12. 26	·1408					
13. 48	23. 25	13. 45	·1401					
13. 53	24. 5	14. 6	·1407					
14. 6	22. 45	14. 24	·1404					
14. 52	23. 15	15. 12	·1406					
14. 57	22. 40	16. 21	·1410					
15. 4	23. 5		* * *					
15. 13	22. 30	17. 18	·1409					
15. 53	23. 30	17. 49	·1403					
16. 13	23. 0	18. 38	·1415					
16. 33	23. 55	19. 11	·1404					
16. 53	23. 30	19. 26	·1405					
17. 12	26. 20	19. 42	·1396					
17. 29	25. 15	20. 4	·1388					
17. 40	26. 30	20. 35	·1386					
17. 49	26. 30	21. 12	·1366					
18. 6	29. 30	21. 21	·1356					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.14		Sept.14						
h m	° ′ ″	h m		h m		h m	°	°
18.21	20.30.25	21.43	·1358					
18.32	30. 5	21.53	·1356					
18.41	27.35	22.11	·1367					
19. 4	25. 0	22.12	·1365					
19.26	24.40	22.45	·1374					
19.53	26.30	22.57	·1383					
19.58	25.30	23. 4	·1379					
20.32	26.40	23.43	·1390					
20.39	26.10	23.59	·1381					
20.43	27. 5							
21. 9	27.30							
21.24	24.35							
21.46	28. 0							
21.58	27.45							
22.17	30. 0							
22.32	28.40							
22.41	28.45							
22.51	28. 5							
23. 2	29.30							
23. 9	28.40							
23.12	29. 0							
23.34	29. 0							
23.59	30.10							
Sept.15		Sept.15		Sept.15		Sept.15		
0. 0	20.30.10	0. 0	·1381	0. 0	·03067	0. 0	61·9	62·8
0.13	29.50	0.15	·1387	1.42	·03112	1. 0	62·2	64·0
0.33	31.20	0.40	·1384	2.12	·03115	2. 0	62·4	64·2
0.42	28.10	0.56	·1390	3.10	·03122	3. 0	62·4	63·4
0.54	27. 0	1.10	·1388	5.14	·03125	9. 0	61·6	62·5
0.59	27.25	1.43	·1394	5.29	·03114	20. 0	60·8	61·8
1. 9	27.10	2. 6	·1389	5.53	·03135	22. 0	60·9	62·2
1.41	29.20	2.21	·1392	6.28	·03120			
1.50	30.15	2.26	·1388	7.42	·03132			
2.21	28.10	2.54	·1393	8.57	·03107			
2.26	27.20	3.36	·1406	9.55	·03080			
2.34	27.10	3.56	·1400	10.42	·03053			
2.40	25.40	4.41	·1408	11.25	·03044			
2.43	26. 0	4.45	·1404	12.41	·03066			
2.54	25.20	5. 6	·1406	13.12	·03053			
3.30	25.45	5.15	·1405	14.25	·03064			
4.10	24.30	5.40	·1389	17.12	·03060			
4.17	24.45	5.58	·1406	17.34	·03048			
5.26	23.45	6.22	·1405	18.56	·03043			
5.41	20.45	6.34	·1400	20.36	·03040			
5.56	22.20	7. 2	·1410	23.59	·03019			
6.14	21.55	7.22	·1405					
6.26	22. 0	7.41	·1405					
6.40	19.20	8.12	·1400					
6.54	18.20	8.29	·1409					
7.13	18.25	9. 0	·1408					
7.23	19.40	9.31	·1411					
	***	9.41	·1416					
8. 3	21. 5	9.54	·1414					
8. 9	20.30	10.25	·1428					
8.18	21. 0	10.42	·1416					
8.26	18.20	10.52	·1413					
8.31	20. 5	11.12	·1417					
8.37	20.30	11.40	·1399					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.15		Sept.15						
h m	° ′ ″	h m		h m		h m	°	°
8.57	20.18.10	11.56	·1406					
9.34	18.10	12.26	·1393					
9.51	22.45	13.11	·1406					
9.58	19.50	13.24	·1410					
10.29	22.55	13.50	·1405					
10.55	19. 0	14.43	·1404					
11.11	19.15	15.12	·1406					
11.34	11. 0	15.36	·1405					
11.42	11.30	16.30	·1407					
11.58	16.10	16.55	·1400					
12.18	20. 0	17.29	·1396					
12.41	30.40	18.12	·1411					
12.44	30.30	18.26	·1408					
13. 8	27.40	18.41	·1410					
13.38	23. 0	19.21	·1403					
14.26	22.10	21.38	·1395					
14.33	23.35	22.25	·1396					
15.16	22. 0	22.44	·1391					
15.38	22.25	23.24	·1398					
16.12	22.25	23.59	·1392					
16.39	24.55							
16.51	25.10							
17.14	30.50							
17.26	30.50							
18.10	23.20							
18.14	23. 5							
18.33	21.40							
18.42	21.55							
18.54	21.25							
19.11	21.55							
19.33	21.10							
21.44	23. 0							
22.29	25.25							
22.52	24.55							
	***							
23.55	26. 0							
23.59	26.40							
Sept.16		Sept.16		Sept.16		Sept.16		
0. 0	20.26.40	0. 0	·1392	0. 0	·03019	1. 0	62·0	63·2
0.24	26. 0	0.20	·1393	0.54	·03043	8. 0	62·4	63·8
0.39	26.30	0.50	·1398	4.43	·03077	20. 0	60·6	61·8
0.56	29. 0	0.55	·1404	5.48	·03095	21. 0	60·6	61·1
0.59	29. 0	1.13	·1395	8.15	·03100	22. 0	60·7	61·2
1. 9	27.55	2. 3	·1399	8.30	·03063	23. 0	60·9	61·4
1.53	28.10	2.36	·1406	8.53	·03055			
2. 6	27.55	2.54	·1402	9. 9	·03064			
2.32	28.15	3.12	·1407	9.26	·03057			
2.47	27.20	3.24	·1404	11.22	·03063			
3. 9	27.45	4.12	·1406	15. 3	·03034			
3.23	27. 0	4.29	·1410	15.25	·03036			
4.27	26.30	4.34	·1406	16.22	·03022			
4.51	25.20	4.42	·1412	16.54	·03020			
4.58	26.20	4.54	·1408	19. 6	·03033			
5.28	24.20	5.12	·1404	21.14	·03008			
5.37	22.30	5.18	·1408	22.49	·02992			
5.43	22.40	5.25	·1402	23.59	·03007			
6. 8	24.20	5.30	·1404					
6.54	23.10	5.41	·1390					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 16 h m	° ′ ″	Sept. 16 h m		h m		h m	°	°
7. 3	20. 22. 15	6. 27	·1403					
7. 33	23. 20	6. 50	·1407					
7. 52	22. 30	6. 59	·1403					
7. 56	22. 30	7. 12	·1409					
8. 23	21. 25	7. 25	·1411					
8. 39	16. 10	7. 52	·1406					
8. 53	19. 30	8. 11	·1406					
8. 59	17. 10	8. 30	·1437					
9. 17	21. 55	8. 47	·1422					
9. 23	20. 10	9. 3	·1396					
9. 39	18. 5	9. 16	·1418					
10. 13	21. 55	9. 35	·1408					
10. 28	21. 20	9. 57	·1413					
10. 42	22. 40	10. 35	·1400					
11. 18	23. 55	10. 45	·1404					
11. 26	23. 20	11. 5	·1403					
11. 38	24. 45	11. 25	·1407					
11. 55	24. 0	11. 30	·1404					
12. 10	26. 20	11. 53	·1408					
12. 24	24. 40	12. 15	·1404					
12. 56	25. 10	12. 24	·1407					
	***	12. 43	·1407					
13. 26	23. 40	13. 4	·1403					
13. 42	21. 30	13. 39	·1406					
14. 23	21. 30	13. 48	·1411					
14. 52	26. 0	13. 55	·1406					
15. 8	26. 0	14. 38	·1410					
	***	15. 5	·1409					
15. 43	22. 50	15. 33	·1397					
16. 26	22. 20	15. 55	·1401					
16. 44	23. 40	16. 20	·1413					
16. 55	23. 0	16. 26	·1408					
16. 59	24. 55	16. 50	·1413					
17. 10	24. 10	17. 20	·1400					
17. 16	25. 0	17. 34	·1403					
17. 33	24. 30		***					
17. 46	22. 5	18. 41	·1398					
18. 11	23. 40	19. 10	·1402					
18. 28	26. 40	19. 50	·1372					
18. 43	26. 40	20. 5	·1367					
19. 4	30. 15	20. 35	·1386					
	***	20. 55	·1396					
19. 39	34. 40	21. 26	·1390					
19. 55	33. 10	21. 50	·1394					
20. 8	30. 55	22. 0	·1390					
20. 58	27. 40	22. 43	·1400					
21. 6	26. 0	23. 7	·1390					
21. 19	25. 0	23. 23	·1372					
21. 46:	28. 5	23. 27	·1397					
22. 23	27. 25	23. 37	·1396					
22. 40	29. 50	23. 54	·1400					
22. 43	29. 10		(†)					
	***							
23. 13	29. 30							
23. 23	28. 20							
23. 28	29. 5							
23. 38	29. 10							
	(†)							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 17 h m	° ′ ″	Sept. 17 h m		Sept. 17 h m		Sept. 17 h m	°	°
	(†)		(†)	0. 0	·03007	0. 0	60·9	61·5
0. 52	20. 29. 30	0. 55	·1399	1. 44	·03013	1. 0	61·3	62·1
1. 24	29. 40	1. 41	·1393	2. 12	·03036	2. 0	61·4	62·1
1. 44	28. 5	2. 20	·1404	6. 57	·03083	3. 0	61·4	62·1
	***	2. 38	·1399	7. 24	·03088	9. 0	61·3	62·4
2. 55	27. 0	3. 6	·1397	7. 49	·03076	20. 0	59·9	60·6
3. 3	26. 20	3. 24	·1408	8. 12	·03078	21. 0	60·0	60·7
3. 24	28. 0	3. 27	·1405	8. 43	·03060	22. 0	60·1	60·8
3. 42	27. 0	3. 36	·1409	11. 18	·03038	23. 0	60·1	60·8
4. 8	28. 0	3. 55	·1404	11. 36	·03047			
4. 17	27. 10	4. 20	·1398	11. 56	·02980			
4. 26	27. 30	4. 33	·1393	12. 42	·02966			
4. 33	26. 5	4. 41	·1396	13. 11	·02951			
4. 47	25. 30	4. 57	·1387	13. 43	·02967			
4. 56	24. 10	5. 13	·1394	14. 11	·02960			
5. 3	24. 0	5. 30	·1402	14. 43	·02977			
5. 11	23. 5	6. 6	·1401	15. 8	·02983			
5. 25	24. 20	6. 27	·1395	16. 4	·02960			
5. 33	24. 30	6. 52	·1399	16. 55	·02977			
5. 48	23. 0	7. 12	·1392	18. 54	·02984			
6. 10	22. 30	7. 34	·1403	19. 35	·02973			
6. 42	19. 5	7. 48	·1392	23. 22	·02964			
6. 56	19. 30	8. 17	·1416	23. 40	·03004			
7. 12	15. 10	8. 42	·1400	23. 44	·02992			
7. 21	15. 20	8. 56	·1406		***			
7. 39	17. 10	9. 23	·1400	23. 59	·02996			
7. 49	13. 20	9. 40	·1400					
8. 4	15. 30	9. 52	·1406					
8. 26	22. 0	10. 11	·1408					
8. 40	20. 55	10. 54	·1417					
8. 56	21. 45	11. 10	·1410					
9. 46	20. 55	11. 26	·1407					
9. 56	21. 55	11. 38	·1414					
10. 6	21. 55	11. 44	·1439					
10. 39	23. 0	11. 57	·1431					
10. 44	21. 35	12. 16	·1444					
10. 58	22. 50	12. 27	·1430					
11. 17	21. 10	12. 45	·1422					
11. 26	21. 15	13. 11	·1404					
11. 48	34. 40	13. 21	·1407					
12. 6	24. 40	13. 30	·1405					
12. 24	29. 10	13. 49	·1413					
12. 36	29. 35	14. 10	·1406					
12. 41	29. 5	14. 21	·1394					
13. 42	13. 5	14. 50	·1399					
13. 59	18. 30	14. 55	·1395					
14. 23	18. 30	15. 10	·1397					
14. 38	16. 25	15. 26	·1404					
14. 53	19. 20	15. 40	·1411					
14. 57	19. 30	15. 55	·1409					
15. 14	23. 35	16. 6	·1414					
15. 27	22. 30	16. 18	·1403					
15. 32	21. 30	16. 52	·1398					
15. 54	20. 20	17. 33	·1400					
15. 57	21. 10	17. 43	·1398					
16. 6	20. 5	17. 52	·1406					
16. 9	20. 15	18. 0	·1403					
16. 26	17. 10	18. 35	·1409					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Sept.17	
h m	° ′ ″
16. 56:	20. 21. 0
17. 35	21. 50
17. 51	20. 15
17. 55	22. 45
18. 2	22. 50
18. 9	21. 45
18. 27	21. 40
18. 39	22. 35
18. 47	21. 0
18. 53	21. 0
19. 10:	25. 30
19. 35	24. 0
19. 41	22. 10
	***
19. 51	24. 30
19. 56	26. 30
	***
20. 20	29. 5
20. 30	29. 0
	***
21. 7	33. 25
21. 11	32. 10
21. 17	33. 30
21. 29	31. 5
	***
22. 14	29. 20
22. 25	31. 15
22. 33	28. 40
22. 40	29. 30
22. 51	29. 5
23. 4	29. 30
23. 9	30. 30
23. 12	30. 40
23. 18	32. 20
23. 24	29. 40
23. 28	31. 10
23. 36	35. 55
23. 40	32. 10
23. 42	33. 20
23. 53	31. 10
23. 59	31. 30
Sept.18	
0. 0	20. 31. 30
0. 8	32. 40
0. 13	30. 50
0. 29	27. 45
0. 51	29. 55
1. 11	32. 10
1. 22	31. 25
1. 26	31. 30
1. 34	34. 50
1. 41	34. 30
1. 53	30. 15
2. 3	33. 30
2. 12	32. 30
	***
2. 33	27. 10

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Sept.17	
h m	
18. 42	·1404
18. 51	·1410
19. 40	·1396
20. 15	·1367
20. 26	·1369
20. 41	·1360
21. 2	·1365
21. 41	·1363
21. 45	·1360
22. 19	·1373
22. 45	·1367
23. 11	·1376
23. 13	·1359
23. 26	·1369
23. 40	·1377
23. 56	·1376
23. 59	·1378
Sept.18	
0. 0	·1378
0. 14	·1387
0. 25	·1381
0. 42	·1388
0. 51	·1397
1. 10	·1379
1. 20	·1376
1. 37	·1383
1. 43	·1376
1. 54	·1370
1. 58	·1380
2. 20	·1349
2. 41	·1386
2. 55	·1397
3. 12	·1386

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
h m	
Sept.18	
0. 0	·02996
	***
1. 7	·03006
1. 53	·03053
1. 57	·03067
2. 11	·03056
	***
3. 11	·03102
3. 40	·03074
3. 56	·03146
4. 24	·03100
6. 19	·03054
7. 56	·03056
8. 16	·03033
8. 29	·03037

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°
Sept.18		
0. 0	60 ·9	61 ·7
1. 0	61 ·0	62 ·6
2. 0	60 ·9	61 ·8
3. 0	61 ·1	61 ·9
9. 15	60 ·6	61 ·9
20. 0	61 ·6	62 ·6
21. 0	61 ·6	62 ·4
22. 0	61 ·5	62 ·5
23. 0	61 ·6	62 ·6

Greenwich Mean Solar Time.	Western Declination.
Sept.18	
h m	° ′ ″
2. 39	20. 28. 30
2. 54	29. 0
2. 58	28. 5
3. 7	28. 30
3. 11	27. 35
3. 22	30. 10
3. 30	30. 0
3. 39	25. 40
3. 41	26. 5
3. 52	3. 10
4. 12	16. 50
4. 15	16. 10
4. 39	25. 20
4. 53	22. 30
5. 3	24. 5
5. 12	23. 40
5. 33	24. 55
5. 55	24. 10
6. 10	25. 15
6. 33	24. 5
6. 51	22. 5
6. 56	22. 30
7. 20	20. 0
7. 32	21. 0
7. 56	19. 0
8. 10	22. 0
8. 21	18. 0
8. 26	13. 20
8. 39	18. 0
8. 47	16. 50
9. 3	6. 0
9. 12	14. 30
9. 36	18. 35
9. 51	16. 20
9. 56	17. 5
10. 3	16. 10
10. 11	17. 55
10. 23	14. 30
10. 53	17. 30
11. 13	16. 25
12. 26	22. 45
12. 39	22. 45
12. 44	22. 5
13. 14	22. 45
13. 25	21. 30
13. 45	25. 30
14. 9	25. 55
14. 17	25. 10
14. 48	22. 55
14. 55	23. 40
15. 11	22. 30
15. 58	20. 20
	***
16. 24	21. 45
16. 38	21. 45
16. 44	22. 45
16. 55	22. 0
17. 9	22. 30
	***

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Sept.18	
h m	
3. 21	·1393
3. 33	·1389
3. 41	·1364
3. 50	·1388
4. 2	·1434
4. 12	·1428
4. 22	·1399
4. 30	·1392
4. 37	·1395
4. 43	·1382
4. 55	·1386
5. 7	·1394
5. 36	·1400
5. 54	·1391
6. 0	·1395
6. 6	·1393
6. 21	·1400
6. 24	·1397
6. 37	·1403
6. 44	·1401
7. 3	·1410
7. 12	·1405
7. 24	·1400
7. 40	·1402
7. 47	·1399
7. 57	·1417
8. 15	·1395
8. 24	·1405
8. 40	·1404
8. 51	·1400
9. 11	·1446
9. 20	·1442
9. 50	·1412
9. 55	·1414
10. 5	·1405
10. 12	·1408
10. 20	·1397
10. 56	·1401
11. 12	·1395
11. 57	·1397
12. 14	·1400
12. 21	·1397
12. 54	·1406
13. 12	·1408
13. 40	·1393
13. 45	·1395
13. 59	·1404
14. 24	·1407
14. 39	·1403
14. 54	·1405
15. 6	·1401
15. 35	·1406
16. 3	·1406
16. 11	·1402
16. 15	·1405
16. 57	·1406
17. 12	·1404
17. 34	·1406

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Sept.18	
h m	
8. 56	·03023
9. 6	·03040
9. 42	·02996
12. 30	·03004
14. 25	·02985
15. 49	·03017
19. 5	·03026
21. 19	·03015
	***
23. 59	·03012

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
h m	°	°

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 18		Sept. 18						
h m	° ′ ″	h m		h m		h m	°	°
18. 19	20. 21. 40	18. 36	·1398					
18. 33	23. 10	19. 11	·1403					
18. 39	22. 15	20. 10	·1399					
18. 41	24. 0	20. 29	·1399					
19. 5	23. 30	21. 22	·1381					
19. 9	24. 20	21. 54	·1389					
19. 13	23. 25	22. 14	·1390					
19. 39	22. 30	22. 36	·1377					
20. 6	23. 5	22. 51	·1381					
20. 11	22. 30	22. 54	·1377					
	* * *	23. 14	·1385					
20. 59	25. 5	23. 35	·1376					
21. 27	24. 30	23. 54	·1385					
21. 41	25. 0	23. 59	·1380					
21. 54	26. 30							
22. 2	26. 5							
22. 17	27. 25							
22. 27	27. 20							
22. 34	26. 40							
22. 40	26. 30							
22. 47	27. 40							
22. 51	26. 45							
22. 58	26. 15							
	* * *							
23. 12	29. 40							
23. 21	28. 25							
23. 26	28. 30							
23. 36	27. 35							
23. 54	28. 15							
23. 59	27. 30							
Sept. 19		Sept. 19		Sept. 19		Sept. 19		
0. 0	20. 27. 20	0. 0	·1380	0. 0	·03012	0. 0	62 ·1	63 ·0
0. 8	26. 45	0. 24	·1389	0. 41	·03028	1. 0	62 ·0	63 ·4
0. 19	28. 30	0. 46	·1390		* * *	2. 0	62 ·0	63 ·4
0. 51	28. 30	0. 56	·1388	2. 45	·03077	3. 0	62 ·3	63 ·5
0. 58	27. 45	1. 6	·1392	3. 57	·03072	9. 0	62 ·1	63 ·4
1. 11	29. 30	1. 18	·1390	4. 58	·03080	20. 0	61 ·2	62 ·0
1. 24	28. 50	1. 44	·1402	5. 19	·03077	21. 0	61 ·3	62 ·0
	* * *	2. 9	·1392	5. 41	·03097	22. 0	61 ·2	62 ·2
1. 50	31. 5	2. 23	·1374	5. 48	·03083	23. 0	61 ·3	62 ·5
1. 58	30. 10	2. 36	·1392	6. 6	·03088			
2. 11	30. 5	2. 55	·1399	6. 54	·03082			
2. 33	20. 40	3. 8	·1395	7. 12	·03074			
2. 41	20. 55	3. 41	·1407	7. 27	·03083			
2. 44	19. 15	3. 55	·1403	7. 43	·03077			
2. 57	23. 20	4. 14	·1404	7. 55	·03082			
3. 6	24. 30	4. 26	·1405	8. 42	·03037			
3. 56	26. 5	4. 56	·1406	10. 18	·03056			
4. 38	24. 20	5. 12	·1400	10. 43	·03046			
5. 6	24. 55	5. 26	·1385	11. 41	·03056			
5. 21	23. 45	5. 43	·1400	14. 9	·03050			
5. 39	18. 20	5. 49	·1396	15. 18	·03036			
5. 43	19. 10	5. 56	·1408	19. 41	·03023			
5. 58	10. 55	6. 6	·1414	22. 57	·02980			
6. 9	12. 0	6. 14	·1410	23. 59	·02977			
6. 26	11. 20	6. 54	·1419					
6. 37	12. 30	7. 22	·1390					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 19		Sept. 19						
h m	° ′ ″	h m		h m		h m	°	°
6. 41	20. 12. 40	7. 27	·1394					
7. 0	17. 40	7. 43	·1386					
7. 12	17. 0	7. 54	·1395					
7. 28	14. 40	7. 58	·1411					
7. 41	19. 20	8. 11	·1403					
7. 56	16. 10	8. 28	·1410					
8. 4	17. 30	8. 41	·1399					
8. 9	21. 40	8. 56	·1405					
8. 13	20. 20	9. 12	·1402					
8. 41	24. 30	9. 34	·1389					
8. 45	19. 0	9. 42	·1396					
8. 55	17. 30	9. 55	·1396					
9. 28	22. 10	10. 20	·1407					
9. 47	21. 20	11. 6	·1399					
9. 58	24. 40	12. 12	·1401					
10. 11	23. 40	12. 54	·1399					
10. 28	25. 10	13. 14	·1402					
11. 11	23. 0	13. 54	·1397					
11. 41	24. 0	14. 15	·1402					
12. 12	24. 0	14. 51	·1399					
12. 43	25. 45	15. 8	·1404					
12. 58	25. 35	15. 29	·1403					
13. 28	23. 25	15. 57	·1395					
14. 6	24. 40	16. 19	·1402					
14. 9	25. 55	16. 41	·1404					
14. 34	25. 40	16. 58	·1399					
15. 2	24. 0	17. 56	·1405					
15. 12	22. 50	18. 20	·1403					
15. 33	23. 30	18. 55	·1392					
15. 53	25. 20	19. 24	·1395					
16. 9	25. 30	20. 15	·1389					
16. 50	22. 30	21. 19	·1397					
17. 24	23. 10	22. 16	·1390					
17. 41	22. 30	23. 59	·1396					
18. 28	23. 25							
18. 48	22. 50							
19. 23	24. 15							
19. 51	23. 15							
20. 47	26. 30							
21. 5	25. 50							
21. 54	27. 5							
21. 57	26. 10							
22. 3	27. 0							
22. 10	26. 30							
22. 21	26. 45							
22. 33	25. 30							
22. 47	27. 5							
22. 54	26. 20							
23. 11	27. 55							
23. 52	27. 0							
	(†)							
Sept. 20		Sept. 20		Sept. 20		Sept. 20		
	(†)	0. 0	·1396	0. 0	·02977	0. 0	61 ·4	62 ·7
0. 49	20. 27. 20	0. 18	·1405	0. 39	·02986	1. 0	61 ·8	62 ·9
1. 11	27. 30	0. 24	·1397	2. 15	·03037	3. 0	62 ·6	63 ·3
1. 26	29. 0	0. 34	·1398	8. 52	·03023	9. 0	61 ·7	62 ·7
1. 43	28. 0	1. 6	·1402	10. 53	·03003	20. 0	61 ·6	63 ·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.20		Sept.20		Sept.20		Sept.20		
h m	° ′ ″	h m		h m		h m	°	°
2. 5	20. 28. 25	1. 26	·1406	11. 40	·03006	21. 0	61·6	62·8
2. 9	29. 10	1. 55	·1388	12. 15	·02992	22. 0	61·8	62·9
2. 24	27. 15	2. 11	·1396	13. 21	·03003	23. 0	62·0	62·9
2. 27	24. 45	2. 26	·1380	16. 56	·02997			
2. 38	22. 55	2. 43	·1388	23. 59	·02978			
	***	3. 14	·1391					
3. 8	24. 35	4. 4	·1402					
3. 11	23. 40	4. 12	·1400					
3. 21	23. 20	4. 28	·1400					
4. 17	25. 50	4. 51	·1403					
4. 39	25. 45	4. 59	·1400					
4. 57	24. 50	5. 22	·1398					
5. 34	25. 0	6. 0	·1400					
5. 56	23. 45	6. 25	·1404					
6. 25	24. 45	6. 41	·1410					
6. 33	24. 35	6. 52	·1408					
6. 41	25. 30	7. 5	·1411					
6. 50	24. 25	7. 12	·1406					
6. 58	24. 30	7. 25	·1411					
7. 20	23. 50	7. 50	·1404					
7. 42	24. 0	8. 40	·1406					
8. 28	21. 50	8. 57	·1415					
8. 47	18. 0	9. 11	·1410					
8. 56	18. 0	9. 36	·1406					
9. 44:	23. 0	10. 19	·1414					
10. 22	21. 0		***					
10. 28	21. 30	10. 41	·1407					
10. 57	19. 55	10. 57	·1403					
11. 4	20. 45	11. 5	·1405					
11. 14	20. 30	11. 11	·1403					
11. 39	24. 0	11. 27	·1412					
11. 58	21. 20	11. 35	·1408					
12. 13	20. 0	11. 41	·1412					
12. 39	19. 20	12. 8	·1412					
12. 59	20. 30	12. 36	·1402					
13. 21	23. 5	13. 9	·1397					
13. 43	22. 55	13. 50	·1404					
14. 26:	26. 5	14. 29	·1402					
14. 51	25. 0	14. 50	·1407					
15. 12	22. 50	15. 6	·1405					
15. 23	23. 0	15. 20	·1408					
15. 40	20. 30	15. 56	·1409					
16. 14	22. 10	16. 14	·1404					
16. 26	25. 35	16. 40	·1403					
16. 40	24. 45	17. 26	·1408					
17. 43	26. 0	18. 24	·1397					
18. 13	28. 30	18. 40	·1403					
18. 23	28. 5	18. 58	·1398					
18. 26	28. 40	19. 41	·1400					
19. 4	25. 30	19. 56	·1403					
19. 11	26. 20	20. 41	·1393					
19. 21	25. 45	20. 56	·1395					
19. 26	26. 50	21. 26	·1384					
19. 39	26. 0	21. 50	·1395					
19. 56	27. 0	22. 11	·1389					
20. 49	26. 40	22. 25	·1395					
21. 16:	27. 0	22. 39	·1391					
21. 31	24. 40	22. 57	·1396					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.20		Sept.20						
h m	° ′ ″	h m		h m		h m	°	°
21. 43	20. 26. 0	23. 42	·1391					
21. 57	26. 0	23. 49	·1386					
22. 6	25. 0	23. 59	·1389					
22. 21	27. 55							
22. 32	26. 40							
22. 59	28. 55							
23. 9	28. 20							
23. 59	30. 30							
Sept.21		Sept.21		Sept.21		Sept.21		
0. 0	20. 30. 30	0. 0	·1389	0. 0	·02978	0. 0	62·1	63·0
2. 48	25. 0	0. 30	·1393	0. 28	·02996	1. 0	62·1	63·0
3. 7	26. 40	0. 34	·1392	2. 43	·03007	2. 0	62·1	63·0
3. 48	21. 10	0. 44	·1398		***	3. 0	61·7	63·0
4. 41	25. 30	0. 54	·1393	3. 19	·03025	9. 0	61·5	62·8
5. 14	23. 55	1. 23	·1394	3. 42	·03002	20. 0	59·8	60·4
5. 52	24. 45	1. 27	·1390	4. 9	·03017	21. 0	59·7	60·2
6. 10	21. 55	1. 40	·1395	4. 54	·03011	22. 0	59·9	61·0
6. 21	22. 30	1. 55	·1388	9. 10	·03016	23. 0	60·0	60·8
6. 28	21. 40	2. 5	·1393	10. 18	·02986			
6. 53	13. 25	2. 26	·1387	12. 41	·02965			
7. 17	20. 0	2. 41	·1391	13. 4	·02952			
7. 41	21. 30	2. 54	·1403	13. 26	·02955			
7. 58	21. 40	3. 6	·1411	14. 20	·02936			
8. 13	20. 35	3. 21	·1400	14. 55	·02942			
10. 22	23. 0	3. 38	·1384	20. 11	·02907			
11. 9	22. 50	3. 55	·1400	21. 56	·02878			
11. 39	23. 20	4. 12	·1410	23. 59	·02880			
12. 11	22. 30	4. 23	·1404					
12. 25	23. 20	4. 43	·1406					
12. 29	22. 50	4. 57	·1411					
12. 41	25. 0	5. 27	·1403					
13. 14	22. 50	5. 56	·1406					
13. 40	25. 20	6. 16	·1400					
14. 10	20. 40	6. 37	·1390					
14. 32	19. 25	7. 10	·1419					
14. 56	22. 10	7. 37	·1409					
15. 23	21. 20	7. 51	·1405					
15. 34	21. 40	8. 3	·1408					
16. 27	20. 30	8. 22	·1403					
16. 58	21. 35	8. 54	·1405					
17. 21	21. 20	10. 11	·1408					
18. 44	22. 40	11. 9	·1406					
19. 9	22. 0	11. 26	·1409					
19. 20	22. 35	11. 56	·1406					
20. 9	22. 50	12. 18	·1406					
20. 41	24. 30	12. 31	·1412					
21. 44	25. 0	12. 43	·1409					
22. 4	25. 55	12. 50	·1411					
22. 23	25. 40	13. 11	·1410					
22. 41	27. 10	13. 21	·1405					
23. 12	27. 30	13. 41	·1412					
23. 26	28. 20	14. 5	·1412					
23. 36	27. 30	14. 41	·1402					
23. 43	28. 10	15. 0	·1407					
23. 59	27. 25	15. 22	·1404					
		16. 2	·1408					
		16. 22	·1405					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
		Sept.21						
h m	° ′ ″	h m		h m		h m	°	°
		17. 6	·1408					
		17. 41	·1405					
		18. 45	·1410					
		19. 35	·1405					
		19. 56	·1395					
		20. 22	·1399					
		22. 21	·1397					
		23. 15	·1403					
		23. 59	·1405					
Sept.22		Sept.22		Sept.22		Sept.22		
0. 0	20. 27. 25	0. 0	·1405	0. 0	·02880	0. 0	60·4	61·1
0. 45	27. 20	0. 19	·1402	2. 40	·02920	1. 0	60·7	61·6
1. 9	25. 45	1. 11	·1397	5. 45	·02939	3. 0	60·8	61·9
1. 38	26. 10	1. 49	·1406	9. 46	·02932	9. 0	60·5	61·7
2. 33	24. 15	2. 4	·1403	14. 40	·02900	20. 0	58·9	60·0
2. 41	24. 20	3. 24	·1406	16. 54	·02878	21. 30	59·4	59·9
2. 55	23. 50	4. 0	·1405	17. 18	·02882			
3. 17	24. 0	4. 24	·1402	23. 59	·02840			
4. 11	22. 55	5. 54	·1406					
5. 6	23. 5	6. 44	·1412					
5. 14	22. 55	6. 57	·1410					
5. 51	24. 0	7. 53	·1412					
6. 8	23. 15	8. 14	·1409					
6. 15	23. 30	9. 44	·1411					
6. 34	23. 0	10. 23	·1408					
6. 50	23. 5	10. 56	·1412					
7. 42	22. 10	11. 35	·1408					
8. 6	22. 40	11. 56	·1411					
8. 36	22. 25	12. 12	·1407					
9. 24	22. 25	12. 34	·1409					
9. 38	21. 0	13. 26	·1408					
10. 3	20. 45	13. 56	·1411					
10. 28	22. 5	14. 13	·1406					
10. 57	20. 25	14. 43	·1414					
11. 48	22. 15	15. 6	·1409					
13. 24	23. 25	15. 38	·1413					
13. 58	22. 45	16. 23	·1415					
14. 9	26. 5	17. 0	·1400					
14. 24	25. 50	18. 6	·1412					
14. 35	23. 50	18. 43	·1411					
15. 14	23. 0	19. 27	·1404					
15. 34	22. 15	19. 43	·1406					
15. 42	22. 40	20. 15	·1399					
16. 18	20. 40	20. 44	·1398					
16. 39	21. 35	20. 56	·1400					
17. 2	21. 5	21. 24	·1396					
17. 39	23. 15	21. 56	·1399					
18. 3	22. 25	22. 13	·1398					
18. 33	23. 0	23. 59	·1406					
20. 8	22. 20							
20. 41	25. 0							
20. 50	24. 50							
21. 23	26. 20							
21. 52	25. 10							
21. 58	26. 0							
22. 8	25. 40							
22. 34	26. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.22								
h m	° ′ ″	h m		h m		h m	°	°
22. 41	20. 26. 0							
22. 53	26. 40							
23. 39	26. 40							
23. 51	26. 25							
23. 59	26. 30							
Sept.23		Sept.23		Sept.23		Sept.23		
0. 0	20. 26. 30	0. 0	·1406	0. 0	·02840	0. 0	60·0	60·8
0. 33	28. 10	0. 38	·1408	2. 4	·02866	9. 0	60·3	61·6
1. 4	28. 0	1. 12	·1405	3. 26	·02900	20. 0	60·2	61·0
1. 12	27. 10	1. 26	·1401	5. 27	·02911	21. 0	60·1	61·0
2. 58	24. 30	2. 45	·1406	14. 40	·02904	22. 0	60·1	61·[illegible]
4. 3	24. 10	3. 36	·1408	19. 36	·02895	23. 0	60·1	61·5
4. 56	25. 0	4. 50	·1403	23. 59	·02873			
5. 12	24. 0	5. 5	·1405					
5. 38	20. 40	5. 25	·1400					
5. 54	20. 40	6. 7	·1411					
6. 11	22. 10	6. 43	·1407					
6. 23	21. 30	7. 14	·1414					
6. 47	22. 55	7. 56	·1409					
7. 4	21. 55	8. 20	·1414					
8. 9	22. 30	8. 37	·1410					
8. 26	23. 20	9. 19	·1415					
8. 47	22. 40	9. 41	·1411					
9. 12	23. 10	9. 57	·1414					
9. 42	23. 5	10. 12	·1412					
9. 53	23. 50	10. 35	·1416					
10. 12	23. 0	11. 8	·1412					
10. 40	23. 10	11. 34	·1415					
10. 48	23. 55	11. 42	·1413					
10. 58	23. 0	12. 5	·1416					
11. 21	22. 30	12. 43	·1414					
11. 41	23. 40	13. 37	·1415					
12. 41	23. 15	13. 48	·1410					
12. 53	24. 20	15. 50	·1414					
13. 37	22. 30	17. 26	·1410					
14. 3	23. 15	18. 12	·1415					
14. 51	22. 50	18. 27	·1408					
15. 36	22. 55	19. 35	·1405					
16. 4	22. 30	20. 6	·1408					
17. 35	23. 10	20. 48	·1402					
17. 59	22. 10	21. 12	·1404					
18. 7	22. 50	21. 23	·1400					
18. 14	22. 20	21. 36	·1403					
18. 40	23. 20	22. 15	·1399					
18. 55	25. 40	23. 59	·1400					
19. 9	25. 10							
19. 21	25. 30							
19. 40	24. 10							
19. 51	23. 0							
19. 57	23. 50							
20. 39	22. 0							
20. 54	22. 55							
21. 20	22. 55							
21. 59	24. 30							
22. 11	24. 0							
23. 23	27. 20							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 23								
h m	° ′ ″	h m		h m		h m	°	°
23. 43	20. 26. 30							
23. 59	26. 50							
Sept. 24		Sept. 24		Sept. 24		Sept. 24		
0. 0	20. 26. 50	0. 0	·1400	0. 0	·02873	0. 0	60·6	61·6
0. 39	27. 10	0. 40	·1404	3. 23	·02922	1. 0	60·6	62·0
1. 10	26. 25	2. 21	·1408	5. 11	·02955	2. 0	60·9	62·1
1. 34	26. 55	3. 20	·1399	5. 58	·02950	3. 0	60·7	62·1
3. 13	25. 45	3. 40	·1402	7. 12	·02959	9. 0	60·7	62·0
3. 33	26. 5	3. 54	·1397	9. 34	·02940	20. 0	59·7	60·2
3. 56	23. 40	4. 7	·1400	13. 12	·02919	21. 0	59·8	60·2
4. 9	23. 15	4. 27	·1394	13. 19	·02924	22. 0	59·7	60·3
4. 21	23. 55	4. 36	·1398	13. 54	·02900	23. 0	60·0	60·6
4. 33	23. 25	4. 55	·1397	14. 53	·02907			
4. 59	23. 10	5. 21	·1403	19. 28	·02887			
5. 11	23. 20	6. 3	·1406	23. 59	·02831			
5. 25	24. 30	6. 14	·1404					
5. 53	24. 0	6. 30	·1405					
6. 11	22. 50	6. 51	·1402					
6. 44	22. 20	7. 7	·1405					
7. 9	23. 0	7. 14	·1402					
7. 38	21. 55	7. 35	·1404					
7. 52	22. 0	7. 44	·1407					
8. 9	21. 5	8. 43	·1408					
8. 51	22. 40	8. 53	·1406					
9. 39	22. 10	9. 13	·1409					
10. 6	23. 15	10. 33	·1412					
10. 36	23. 5	10. 54	·1410					
11. 9	23. 30	11. 20	·1413					
12. 12	24. 10	11. 57	·1412					
12. 21	23. 40	12. 11	·1415					
	***	12. 21	·1412					
13. 11	24. 15	13. 12	·1412					
13. 26	29. 40	13. 26	·1421					
14. 3	22. 55	13. 45	·1419					
14. 23	22. 35	13. 55	·1415					
14. 55	23. 10	14. 18	·1414					
15. 26	22. 0	14. 47	·1408					
16. 17	21. 20	15. 50	·1414					
16. 23	21. 55	16. 51	·1415					
16. 58	21. 40	17. 51	·1412					
17. 36	22. 50	18. 2	·1415					
17. 51	21. 45	18. 46	·1413					
18. 9	22. 10	18. 56	·1409					
18. 34	21. 30	19. 11	·1410					
18. 41	22. 0	19. 29	·1407					
18. 54	21. 10	19. 40	·1412					
19. 20	21. 25	19. 45	·1408					
19. 28	20. 55	19. 57	·1410					
19. 36	21. 25	21. 14	·1400					
19. 41	20. 30	21. 33	·1396					
	***	22. 12	·1403					
19. 59	20. 50	23. 11	·1408					
20. 21	22. 15	23. 21	·1405					
20. 27	21. 20	23. 33	·1417					
20. 36	22. 30	23. 42	·1414					
21. 11	23. 25	23. 54	·1418					
21. 17	24. 35	23. 59	·1414					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept. 24								
h m	° ′ ″	h m		h m		h m	°	°
21. 25	20. 23. 40							
21. 47	23. 55							
21. 54	24. 30							
21. 56	24. 0							
22. 10	25. 40							
22. 29	25. 40							
23. 20	27. 50							
23. 40	31. 5							
23. 43	32. 55							
23. 48	32. 5							
23. 53	33. 20							
23. 57	33. 30							
23. 59	35. 55							
Sept. 25		Sept. 25		Sept. 25		Sept. 25		
0. 0	20. 35. 55	0. 0	·1414	0. 0	·02831	0. 0	60·1	60·9
	***	0. 15	·1396	0. 45	·02854	1. 0	60·7	61·5
0. 10	33. 0	0. 24	·1401	1. 25	·02860	3. 0	60·9	62·3
	***	0. 55	·1399	1. 43	·02916	9. 0	60·8	62·1
0. 25	30. 20	1. 7	·1405	2. 0	·02887	20. 0	60·6	61·8
0. 48	32. 35	1. 19	·1400	2. 7	·02882	21. 0	60·7	61·6
1. 9	31. 30	1. 40	·1436	2. 44	·02940	22. 0	60·8	61·8
1. 18	28. 25	1. 55	·1411	2. 59	·02938	23. 0	60·8	61·8
1. 21	29. 55	2. 4	·1399		***			
1. 26	28. 20	2. 12	·1406	3. 18	·02978			
1. 33	29. 30	2. 36	·1409	3. 26	·02967			
1. 39	33. 0	2. 43	·1417		***			
1. 40	36. 10	3. 2	·1406	4. 22	·03014			
1. 56	28. 40	3. 35	·1388	4. 34	·03003			
2. 2	28. 40	3. 51	·1399	5. 42	·03012			
2. 7	27. 10	3. 54	·1395	6. 6	·03015			
2. 17	30. 20	4. 6	·1393	6. 13	·03023			
2. 23	30. 10	4. 20	·1410	6. 50	·03034			
2. 25	31. 0	4. 27	·1392	7. 10	·03018			
2. 28	31. 0	4. 35	·1399	7. 41	·03014			
2. 42	36. 40	4. 50	·1401	8. 7	·02992			
2. 57	31. 40	5. 6	·1393	9. 15	·02957			
3. 3	32. 15	5. 21	·1401	11. 41	·02937			
3. 6	30. 40	5. 24	·1397	12. 12	·02904			
3. 12	30. 40	5. 51	·1411	12. 26	·02925			
3. 23	28. 0	6. 3	·1383	13. 12	·02894			
3. 27	28. 30	6. 19	·1410	14. 41	·02912			
3. 32	27. 50	6. 40	·1382	16. 27	·02922			
3. 41	27. 50	6. 54	·1395	18. 42	·02904			
3. 51	31. 25	7. 12	·1384	18. 55	·02913			
4. 3	30. 0	7. 27	·1390	19. 41	·02843			
4. 10	27. 15	7. 50	·1404	20. 13	·02867			
4. 26	34. 20	8. 44	·1408	22. 31	·02870			
4. 33	30. 55	8. 54	·1406	22. 39	·02881			
4. 39	32. 40	9. 23	·1411	22. 49	·02860			
4. 56	33. 55	9. 33	·1417	22. 56	·02860			
5. 8	31. 10	9. 55	·1410	23. 4	·02872			
5. 13	30. 55	10. 20	·1409	23. 18	·02872			
5. 26	33. 40	10. 35	·1406	23. 29	·02859			
5. 29	32. 30	10. 56	·1411	23. 59	·02873			
5. 38	31. 55	11. 11	·1405					
5. 43	30. 10	11. 41	·1408					
5. 55	31. 55	11. 47	·1420					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.25		Sept.25						
h m	° ′ ″	h m		h m		h m	°	°
6. 8	20. 22. 30	12. 0	·1420					
6. 26	32. 20	12. 24	·1407					
6. 39	25. 0	12. 34	·1420					
6. 43	24. 55	12. 56	·1423					
6. 47	22. 30	13. 20	·1410					
6. 56	22. 0	13. 35	·1412					
7. 4	23. 0	14. 12	·1406					
7. 13	20. 50	14. 54	·1407					
7. 24	19. 40	15. 3	·1402					
7. 32	20. 5	15. 18	·1408					
7. 38	19. 10	15. 45	·1405					
7. 55	22. 0	16. 9	·1406					
8. 6	21. 45	16. 24	·1409					
8. 17	23. 0	16. 59	·1420					
8. 30	22. 0	17. 42	·1406					
9. 9	23. 25	17. 54	·1409					
9. 24	21. 55	18. 5	·1402					
9. 40	23. 5	18. 13	·1406					
9. 47	23. 0	18. 45	·1373					
9. 59	23. 40	18. 57	·1381					
10. 56	22. 55	19. 27	·1429					
11. 2	22. 0	20. 9	·1403					
11. 15	21. 45	20. 19	·1409					
11. 25	22. 5	20. 26	·1402					
11. 47	19. 55	20. 35	·1407					
11. 58	19. 25	20. 46	·1404					
12. 9	16. 0	21. 4	·1396					
12. 20	14. 50	21. 12	·1400					
13. 4	25. 5	21. 25	·1394					
13. 21	23. 55		***					
13. 43	21. 0	22. 25	·1392					
14. 19	19. 20	22. 40	·1405					
14. 29	21. 0	22. 45	·1391					
14. 44	21. 30	22. 55	·1385					
14. 58	20. 0	23. 1	·1391					
15. 3	20. 40	23. 8	·1389					
15. 28	20. 40	23. 20	·1395					
	***	23. 30	·1384					
16. 9	21. 50	23. 56	·1393					
16. 18	20. 55	23. 59	·1389					
16. 26	22. 5							
16. 30	21. 55							
16. 41	19. 5							
16. 58	19. 35							
17. 28	18. 40							
17. 34	19. 40							
17. 41	19. 0							
17. 52	20. 10							
17. 59	19. 10							
18. 3	19. 15							
18. 9	20. 50							
18. 24	23. 15							
18. 32	22. 50							
18. 39	27. 50							
18. 44	40. 0							
18. 53	43. 30							
19. 3	41. 55							
19. 14	33. 55							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.25								
h m	° ′ ″	h m		h m		h m	°	°
19. 21	20. 31. 40							
19. 26	32. 50							
19. 29	30. 0							
19. 41	28. 0							
20. 6	23. 15							
20. 12	26. 50							
20. 13	23. 10							
20. 14	25. 10							
20. 23	23. 20							
20. 27	24. 30							
20. 38	24. 20							
20. 41	25. 40							
20. 56	23. 0							
21. 18	24. 15							
21. 24	25. 40							
21. 27	24. 55							
21. 34	26. 5							
21. 41	26. 10							
21. 48	25. 30							
22. 2	26. 30							
22. 7	27. 30							
22. 14	26. 25							
22. 27	32. 0							
22. 44	28. 20							
22. 51	30. 5							
22. 58	29. 30							
23. 9	32. 10							
23. 15	31. 0							
23. 21	29. 25							
23. 32	29. 10							
	***							
23. 59	30. 40							
Sept.26		Sept.26		Sept.26		Sept.26		
0. 0	20. 30. 40	0. 0	·1389	0. 0	·02873	0. 0	61 ·1	62 ·5
0. 39	27. 35	0. 21	·1396	0. 31	·02896	1. 0	61 ·3	62 ·5
0. 48	29. 55	0. 29	·1405	0. 54	·02905	2. 0	61 ·4	62 ·8
0. 55	30. 10	0. 38	·1395	1. 9	·02902	3. 0	61 ·5	63 ·0
1. 21	28. 20	0. 56	·1406	3. 22	·02964	9. 0	61 ·6	62 ·9
1. 28	28. 30	1. 21	·1394	3. 39	·02957	20. 0	60 ·9	62 ·1
1. 41	27. 55	1. 33	·1397	3. 56	·02973	21. 0	61 ·0	61 ·8
1. 56	28. 5	1. 44	·1395	4. 21	·02964	22. 0	61 ·2	61 ·9
2. 11	27. 0	2. 11	·1395	5. 6	·02977	23. 0	61 ·2	62 ·0
2. 47	27. 0	2. 43	·1403	5. 58	·02975			
2. 57	27. 55	2. 57	·1407	6. 36	·02996			
3. 9	27. 5	3. 11	·1405	9. 18	·02964			
3. 16	28. 35	3. 19	·1414	9. 53	·02944			
3. 28	27. 0	3. 38	·1400	12. 11	·02957			
3. 56	28. 0	3. 56	·1409	12. 56	·02948			
3. 59	27. 30	4. 11	·1400	14. 44	·02964			
4. 24	27. 0	4. 39	·1399	19. 56	·02943			
4. 41	25. 35	5. 4	·1412	22. 12	·02905			
4. 56	26. 0	5. 14	·1408	23. 59	·02916			
5. 10	25. 10	5. 29	·1414					
5. 25	25. 45	5. 50	·1405					
5. 39	25. 0	6. 11	·1392					
5. 48	23. 15	6. 27	·1396					
5. 57	24. 0	6. 45	·1406					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.	Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Sept.26		Sept.26							Sept.26								
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
6.13	20.17. 0	7. 6	·1410						21.43	20.22.55							
6.29	15.30	7.33	·1402						21.58	25.15							
6.43	16.40	7.42	·1407						22. 8	24.30							
6.58	15.10	7.59	·1400						23.26	27. 0							
7.23	20.30	8.16	·1407						23.33	26.50							
7.39	21.35	8.25	·1404						23.48	28.30							
7.46	23. 5	8.40	·1413						23.59	28. 0							
8. 6	22.55	8.43	·1408														
8.17	23. 0	9.11	·1413						Sept.27		Sept.27		Sept.27		Sept.27		
8.28	22. 0	9.20	·1410						0. 0	20.28. 0	0. 0	·1398	0. 0	·02916	0. 0	61·5	62·6
8.37	23.20	9.36	·1426						0. 9	27.55	0.29	·1401	4.43	·02958	1. 0	61·4	62·6
8.56	20.30	9.43	·1418						0.17	27.20	0.40	·1404	5.27	·02955	2. 0	61·4	62·6
9.10	21.50	10. 0	·1418						0.24	29. 5	1.19	·1402	5.58	·02962	3. 0	61·3	62·6
9.25	21.20	10.33	·1404						0.39	28.10	1.35	·1399	7.57	·02968	9. 0	61·4	62·8
9.37	23.50	10.54	·1409						0.42	28.25	1.54	·1405	8.21	·02943	20. 0	60·7	62·0
9.56	19.45	11. 3	·1406						0.56	27.30	2. 7	·1401	8.43	·02937	21. 0	61·1	62·1
10.26	21.15	11.14	·1408						1.13	28.30	2.15	·1406	9. 6	·02940	22. 0	60·8	62·1
10.34	20.55	11.20	·1404						1.17	27.50	2.40	·1403	9.40	·02912	23. 0	61·1	62·3
10.55	22.40	11.40	·1408						1.43	26.30	2.50	·1406	11.12	·02948			
11.14	20.20	11.55	·1401						1.51	27.20	3. 6	·1402	13.26	·02920			
11.27	20. 5	12.15	·1410						2. 7	26.10	3.56	·1406	13.52	·02926			
11.37	20.55	12.26	·1406						2.25	26.25	4.10	·1401	15.32	·02917			
11.56	20.55	12.37	·1410						2.33	25.40	4.34	·1409	15.57	·02923			
12.13	22.45	12.54	·1410						2.48	25.40	4.56	·1410	20.19	·02918			
12.25	22.10	13.21	·1401						2.57	24.50	5.40	·1400	22.12	·02897			
12.43	23.20	13.34	·1403						3. 6	25.10	5.56	·1408	23.59	·02892			
13. 7:	22.15	13.43	·1399						3.23	24.30	6. 6	·1405					
13.27	22.55	14.11	·1403						3.51	24.35	6.34	·1412					
14. 0	21.55	15.14	·1402						4. 0	23.20	6.45	·1407					
14. 7	22.25	15.27	·1405						4.33	23.20	7. 5	·1404					
14.34	21.45	15.55	·1403						4.57	24.10	7.12	·1407					
14.41	22.30	16.13	·1407						5.24	22.50	7.20	·1403					
14.51	22.20	16.20	·1404						5.36	20.50	7.34	·1416					
15. 6	23.25	18.31	·1405						6.13	22.40	7.47	·1411					
15.25	22.55	18.40	·1411							***	8. 9	·1432					
15.28	23.25	18.45	·1402						7. 4	22.50	8.15	·1424					
15.41	22.30	18.50	·1408						7.19	19.20	8.35	·1422					
16. 6	22.40	19. 5	·1401						7.41	23. 0	8.39	·1416					
16.10	22.15	19.21	·1406						7.47	21.45	9.10	·1429					
16.20	23.10	21.39	·1394						8. 3	25.30	9.41	·1413					
16.26	22. 0	22. 0	·1401						8.10	24.30	9.56	·1416					
17.23	22.25	22.19	·1386						8.13	24.30	10.15	·1406					
17.50	21.45	22.30	·1390						8.23	23. 0	10.41	·1404					
18.36	21.45	23.53	·1401						8.30	24.25	11.15	·1408					
18.41	21.30	23.59	·1398						8.56	21.10	11.34	·1408					
18.46	22.45								9.10	24.35	11.52	·1400					
18.51	20.30								9.25	24. 5	12.20	·1408					
18.56	22. 0								9.44:	20.20	12.41	·1410					
19. 3	20.30								9.56	20.25	12.44	·1408					
19.20	20.25								10.10	19. 0	12.55	·1412					
19.28	21. 5								10.26	18.30	13.11	·1407					
19.49	20.40								10.44	19. 0	13.25	·1411					
19.54	21.35								10.57	21.10	13.45	·1404					
19.59	20.25								11.11	21.20	14. 6	·1408					
20. 6	22. 0								11.23	19.50	14.14	·1405					
20.12	21.20								11.44	24.30	14.29	·1409					
20.35	21.10								11.57	25.†50	14.43	·1406					
21.28	23. 0								12. 6	24.50	14.57	·1409					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.27		Sept.27						
h m	° ′ ″	h m		h m		h m	°	°
12. 17	20. 23. 55	15. 21	·1409					
12. 29	23. 30	15. 50	·1403					
12. 39	24. 15	16. 26	·1408					
13. 7	21. 0	17. 15	·1407					
13. 12	21. 30	17. 40	·1411					
13. 20	20. 50	18. 12	·1410					
13. 39	22. 40	19. 5	·1406					
13. 41	22. 20	20. 51	·1396					
13. 50	23. 40	20. 56	·1395					
14. 8	22. 15	22. 30	·1397					
14. 26	24. 10	23. 59	·1405					
14. 41	24. 10							
14. 58	23. 30							
15. 14	23. 40							
15. 38	22. 50							
15. 51	24. 5							
16. 14	22. 20							
17. 9	21. 20							
17. 11	21. 50							
17. 20	21. 20							
17. 26	22. 5							
17. 43	20. 50							
18. 24	22. 0							
18. 41	21. 10							
18. 51	22. 0							
18. 56	21. 5							
	***							
19. 55	21. 5							
20. 5	22. 0							
20. 13	21. 30							
21. 25	23. 0							
21. 30	23. 50							
21. 34	23. 10							
21. 41	24. 30							
21. 51	24. 0							
22. 15	25. 55							
23. 26	27. 50							
23. 39	27. 40							
23. 42	28. 55							
23. 50	28. 50							
23. 55	28. 10							
23. 59	27. 55							
Sept.28		Sept.28		Sept.28		Sept.28		
0. 0	20. 27. 55	0. 0	·1405	0. 0	·02892	0. 0	61·4	62·5
0. 17	26. 55	0. 16	·1403	4. 4	·02947	1. 0	61·6	62·7
	***	0. 30	·1411	11. 32	·02980	2. 0	61·6	62·5
0. 29	28. 55	1. 0	·1403	12. 12	·02974	3. 0	61·8	63·1
0. 39	28. 55	1. 43	·1400	21. 11	·02968	9. 0	62·4	63·9
0. 51	27. 55	2. 5	·1397	23. 59	·02940	20. 0	62·8	63·1
1. 29	27. 40	2. 57	·1408			21. 0	62·2	63·0
1. 41	27. 10	3. 34	·1402			22. 0	62·2	63·7
1. 55	27. 40	3. 50	·1405			23. 0	62·2	63·7
2. 14	25. 10	4. 40	·1406					
3. 26	23. 10	5. 13	·1409					
5. 21	23. 0	6. 41	·1413					
5. 50	23. 30	9. 42	·1409					
7. 23	23. 5	10. 20	·1410					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept.28		Sept.28						
h m	° ′ ″	h m		h m		h m	°	°
7. 54	20. 22. 45	11. 12	·1407					
8. 31	23. 0	11. 36	·1411					
8. 41	22. 25	11. 55	·1417					
9. 38	23. 0	12. 30	·1410					
10. 56	22. 10	14. 23	·1407					
11. 21	22. 30	15. 20	·1408					
11. 36	23. 20	15. 34	·1406					
12. 10	22. 10	16. 12	·1406					
13. 6	22. 5	16. 42	·1408					
13. 25	21. 40	16. 55	·1406					
13. 33	22. 10	19. 53	·1406					
13. 53	21. 30	21. 14	·1398					
14. 6	22. 0	21. 36	·1400					
14. 21	21. 20	23. 15	·1405					
14. 35	21. 40	23. 24	·1403					
15. 0	20. 50	23. 37	·1407					
16. 11	22. 40	23. 59	·1407					
16. 27	22. 0							
18. 40	22. 10							
	***							
19. 33	21. 20							
19. 51	21. 30							
20. 24	21. 0							
21. 9	21. 30							
22. 4	23. 20							
23. 3	25. 10							
23. 12	26. 0							
23. 21	25. 30							
23. 28	26. 25							
23. 59	27. 0							
Sept.29		Sept.29		Sept.29		Sept.29		
0. 0	20. 27. 0	0. 0	·1407	0. 0	·02940	0. 0	62·6	63·7
2. 14	26. 20	1. 6	·1406	3. 26	·02986	1. 0	62·8	64·5
2. 38	25. 15	3. 26	·1404	9. 41	·03006	2. 0	62·8	64·4
6. 11	24. 20	5. 56	·1412	16. 53	·03035	3. 0	63·0	64·0
6. 55	23. 40	8. 53	·1414	20. 18	·03024	9. 0	63·1	64·2
13. 41	22. 0	9. 12	·1416	22. 32	·03000	21. 10	62·8	65·0
15. 11	22. 30	13. 7	·1408	23. 59	·02998			
15. 36	22. 0	13. 20	·1410					
15. 55	22. 25	13. 55	·1407					
16. 26	22. 0	16. 43	·1408					
18. 27	22. 30	17. 42	·1411					
19. 56	21. 55	18. 19	·1408					
21. 25	22. 25	19. 6	·1408					
22. 56	24. 30	21. 37	·1396					
23. 10	24. 30	23. 14	·1395					
23. 39	24. 55	23. 59	·1399					
23. 59	26. 0							
Sept.30		Sept.30		Sept.30		Sept.30		
0. 0	20. 26. 0	0. 0	·1399	0. 0	·02998	0. 0	63·6	65·5
1. 11	27. 30	1. 15	·1404	0. 17	·03005	9. 20	63·6	65·9
1. 26	27. 20	2. 59	·1408	2. 52	·03040	20. 0	62·6	64·0
1. 41	27. 40	3. 36	·1407	9. 52	·03048	21. 0	62·8	64·2
2. 38	26. 30	6. 26	·1413	20. 12	·03032	22. 0	63·0	64·6
2. 48	27. 0	6. 55	·1409	23. 59	·03000	23. 0	62·8	64·0
3. 23	25. 30	8. 12	·1416					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Sept. 30		Sept. 30						
h m	° ′ ″	h m		h m		h m	°	°
5. 4	20. 24. 30	8. 28	·1412					
5. 39	25. 0	8. 41	·1415					
6. 55	24. 30	8. 54	·1412					
7. 13	25. 5	9. 6	·1415					
7. 43	24. 55	9. 15	·1411					
8. 2	23. 30	9. 57	·1412					
8. 40	22. 35	10. 55	·1410					
8. 58	23. 30	14. 36	·1409					
9. 11	23. 0	19. 49	·1404					
9. 28	23. 30	21. 6	·1396					
18. 45	22. 10	21. 18	·1398					
19. 43	21. 10	22. 27	·1395					
20. 56	20. 20	23. 59	·1403					
21. 51	22. 0							
22. 6	23. 0							
22. 11	22. 15							
23. 47	26. 10							
23. 59	26. 20							
Oct. 1		Oct. 1		Oct. 1		Oct. 1		
0. 0	20. 26. 20	0. 0	·1403	0. 0	·03000	0. 0	62·9	63·9
1. 26	27. 50	0. 26	·1401	4. 5	·03031	1. 0	63·4	64·2
1. 57	27. 50	2. 6	·1405	9. 5	·03043	2. 0	63·2	64·0
2. 39	26. 20	2. 37	·1403	9. 54	·03035	3. 0	63·2	64·4
2. 52	26. 40	2. 45	·1407	22. 12	·02976	9. 0	63·6	64·1
3. 6	26. 0	3. 26	·1403	23. 19	·02957	20. 0	62·6	63·3
3. 10	26. 30	4. 12	·1406	23. 59	·02964	21. 0	62·4	63·2
4. 34	24. 55	4. 34	·1404			22. 0	62·1	63·0
4. 44	25. 10	4. 56	·1406			23. 0	62·1	63·0
5. 19	23. 40	5. 10	·1404					
5. 36	24. 5	5. 26	·1411					
5. 53	23. 55	5. 40	·1407					
6. 12	25. 10	6. 11	·1412					
	***	6. 27	·1409					
6. 58	24. 30	6. 51	·1409					
7. 18	24. 55	7. 12	·1410					
7. 39	23. 40	7. 43	·1407					
7. 57	22. 15	8. 17	·1406					
8. 18	23. 0	9. 11	·1410					
8. 27	22. 45	9. 27	·1414					
8. 49	23. 10	9. 40	·1418					
9. 29	21. 35	10. 2	·1411					
9. 47	22. 50	10. 37	·1411					
10. 23	21. 30	10. 54	·1415					
10. 58	22. 10	11. 11	·1410					
11. 23	21. 0	12. 27	·1409					
12. 39	22. 55	12. 46	·1411					
13. 41	22. 40	13. 2	·1407					
14. 3	24. 0	13. 43	·1411					
14. 12	23. 20	15. 14	·1410					
14. 36	23. 25	15. 30	·1413					
14. 59	21. 55	17. 9	·1410					
15. 9	23. 0	19. 19	·1414					
15. 21	22. 0	19. 51	·1409					
15. 55	21. 30	20. 42	·1404					
16. 13	22. 30	21. 26	·1390					
16. 41	22. 5	21. 45	·1392					
17. 26	22. 45	21. 56	·1388					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 1		Oct. 1						
h m	° ′ ″	h m		h m		h m	°	°
17. 58	20. 22. 40	22. 11	·1390					
18. 43	21. 40	22. 52	·1393					
19. 3	22. 0	23. 21	·1398					
	***	23. 40	·1398					
19. 21	21. 20	23. 55	·1401					
	***	23. 59	·1394					
19. 35	22. 0							
19. 49	21. 0							
20. 11	20. 45							
20. 21	21. 20							
20. 39	21. 0							
21. 26	23. 30							
21. 48	27. 10							
21. 56	26. 45							
22. 18	28. 30							
22. 41	28. 15							
22. 44	27. 30							
23. 16	30. 0							
23. 41	30. 10							
23. 53	30. 50							
23. 56	30. 5							
23. 59	30. 0							
Oct. 2		Oct. 2		Oct. 2		Oct. 2		
0. 0	20. 30. 0	0. 0	·1394	0. 0	·02964	0. 0	62·1	63·2
0. 26	31. 30	0. 13	·1391	1. 30	·02973	1. 0	62·6	64·0
0. 30	31. 0	0. 25	·1397	1. 57	·02992	2. 0	62·6	64·0
0. 36	32. 40	0. 30	·1394	2. 12	·02983	3. 0	62·6	64·0
0. 57	33. 30	0. 42	·1396	5. 24	·03048	9. 0	62·6	64·1
1. 28	32. 30	1. 26	·1400	5. 53	·03091	20. 0	62·6	63·5
1. 56	33. 10	1. 55	·1405	6. 40	·03074	21. 0	62·7	64·2
2. 11	31. 15	2. 12	·1395	7. 11	·03074	22. 0	63·0	64·2
2. 27	31. 0	2. 24	·1397	8. 59	·03063	23. 0	62·8	63·9
2. 33	30. 20	2. 36	·1395	11. 43	·03023			
2. 40	28. 50	2. 42	·1398	13. 55	·03016			
2. 48	29. 30	2. 53	·1396	14. 30	·02976			
2. 54	28. 40	3. 20	·1398	15. 55	·02996			
2. 58	29. 10	3. 37	·1400	20. 0	·03007			
3. 4	28. 30	3. 43	·1398	23. 43	·02977			
3. 11	30. 20	4. 0	·1400	23. 59	·02982			
3. 20	29. 30	4. 19	·1389					
3. 46	31. 25	4. 34	·1397					
4. 10:	33. 30	4. 45	·1395					
4. 35	30. 30	5. 2	·1400					
5. 8	30. 20	5. 12	·1398					
5. 38	23. 30	5. 29	·1376					
5. 41	23. 30	5. 55	·1379					
6. 6	18. 0	6. 3	·1374					
6. 20	22. 0	6. 21	·1385					
6. 28	23. 0	6. 30	·1388					
6. 47:	21. 0	6. 41	·1380					
6. 58	21. 40	7. 20	·1394					
7. 14	21. 0	7. 25	·1390					
7. 29	18. 45	7. 41	·1394					
7. 52	20. 30	7. 49	·1391					
	***	7. 59	·1393					
8. 13	20. 30	8. 20	·1391					
8. 21	19. 30	8. 45	·1400					

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Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 2		Oct. 2						
h m	° ′ ″	h m		h m		h m	°	°
8. 36	20. 21. 40	8. 56	·1396					
9. 9	20. 25	9. 13	·1403					
9. 35	20. 55	9. 26	·1401					
9. 54	22. 10	9. 45	·1406					
10. 9	21. 30	10. 6	·1404					
10. 42	22. 55	10. 37	·1408					
11. 6	22. 20		***					
11. 56	22. 20	12. 44	·1406					
12. 3	22. 55	12. 59	·1408					
12. 38	22. 30	13. 12	·1405					
13. 46	20. 40	13. 36	·1408					
13. 58	25. 40	13. 48	·1405					
14. 8	25. 0	13. 57	·1408					
14. 33	18. 30	14. 10	·1417					
14. 41	17. 50	14. 21	·1415					
15. 7	18. 20	14. 35	·1419					
	***	14. 51	·1417					
15. 44	21. 45	15. 12	·1408					
15. 58	21. 0	15. 35	·1404					
16. 8	22. 0	15. 50	·1408					
16. 14	20. 50	15. 57	·1406					
16. 30	21. 30	16. 39	·1409					
16. 52	20. 50	17. 2	·1413					
16. 58	19. 55	17. 38	·1406					
17. 28	22. 15	17. 53	·1409					
17. 36	22. 0	18. 50	·1400					
17. 51	22. 35	18. 59	·1403					
17. 59	22. 0	19. 26	·1400					
18. 34	21. 30	19. 39	·1403					
18. 43	22. 10	20. 42	·1401					
18. 49	21. 30	21. 20	·1395					
18. 57	22. 10	21. 38	·1399					
19. 21	22. 0	21. 46	·1394					
19. 28	21. 30	22. 19	·1398					
21. 21	22. 20	22. 55	·1394					
21. 29	23. 35	23. 10	·1396					
21. 42	22. 40	23. 20	·1393					
22. 3	23. 40	23. 34	·1395					
22. 27	26. 0	23. 51	·1389					
22. 56	25. 35	23. 59	·1395					
23. 6	26. 30							
23. 20	25. 40							
23. 35	27. 0							
23. 48	25. 55							
23. 59	27. 55							
Oct. 3		Oct. 3		Oct. 3		Oct. 3		
0. 0	20. 27. 55	0. 0	·1395	0. 0	·02982	0. 0	63·0	64·0
0. 13	28. 15	0. 30	·1396	1. 12	·03016	1. 0	63·2	64·4
0. 34	28. 20	1. 6	·1387	2. 19	·03037	2. 0	63·2	64·2
0. 50	27. 55	1. 29	·1395	3. 9	·03020	3. 0	63·2	64·5
0. 56	26. 15	1. 43	·1401	6. 58	·03042	9. 0	63·6	65·0
0. 59	26. 45	1. 54	·1400	7. 29	·03057	20. 0	63·5	64·4
1. 9	25. 50	2. 5	·1402	7. 56	·03040	21. 0	63·3	64·6
1. 27	25. 45	2. 55	·1397	8. 20	·03026	22. 0	63·3	64·2
2. 26	28. 30	3. 25	·1395	8. 42	·03043	23. 0	63·3	64·2
3. 6	26. 50	3. 43	·1400	11. 41	·03054			
3. 28	24. 30	4. 33	·1405	13. 57	·03042			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 3		Oct. 3		Oct. 3				
h m	° ′ ″	h m		h m		h m	°	°
3. 52	20. 25. 10	5. 5	·1395	15. 9	·03021			
4. 50	25. 50	5. 11	·1396	15. 52	·02957			
5. 4	24. 0	5. 20	·1394	15. 57	·02960			
5. 10	23. 55	5. 49	·1405	16. 12	·02948			
5. 24	22. 0	6. 14	·1403	16. 50	·02932			
5. 39	21. 55	6. 25	·1405	17. 11	·02943			
5. 52	23. 0	6. 51	·1396	17. 25	·02937			
6. 11	22. 35	7. 12	·1393	17. 34	·02952			
6. 26	23. 30	7. 40	·1426	18. 6	·02975			
6. 33	22. 15	7. 57	·1422	21. 21	·03000			
6. 40	21. 30	8. 12	·1414	23. 59	·03014			
7. 0	15. 0	8. 27	·1393					
7. 20	12. 5	8. 43	·1398					
7. 26	9. 40	8. 56	·1396					
7. 34	11. 50	9. 13	·1400					
7. 41	11. 50	9. 57	·1403					
8. 13	20. 20	10. 7	·1407					
8. 26	18. 25	10. 27	·1400					
8. 48	22. 50	10. 36	·1404					
8. 56	22. 15	11. 12	·1407					
9. 11	22. 50	11. 27	·1400					
9. 32	22. 5	11. 43	·1406					
9. 43	22. 45	11. 56	·1402					
9. 57	21. 20	12. 19	·1408					
10. 5	21. 55	12. 26	·1405					
10. 17	21. 40	12. 46	·1404					
10. 26	20. 40	12. 59	·1408					
11. 6	21. 50	13. 35	·1410					
11. 23	20. 40	13. 42	·1406					
11. 36	21. 50	14. 0	·1408					
11. 49	21. 10	14. 9	·1414					
12. 28	23. 25	14. 43	·1404					
12. 39	23. 0	15. 6	·1394					
12. 45	23. 25	15. 23	·1396					
12. 58	22. 15	15. 55	·1415					
14. 6	21. 45	16. 6	·1427					
14. 10	22. 55	16. 14	·1425					
14. 26	21. 50	16. 40	·1435					
14. 34	22. 20	16. 55	·1421					
14. 40	21. 30	17. 24	·1412					
14. 51	21. 0	17. 28	·1398					
14. 56	21. 25	17. 35	·1404					
15. 34	35. 5	17. 55	·1397					
15. 40	34. 20	18. 22	·1404					
15. 43	34. 40	18. 30	·1400					
15. 55	30. 0	18. 51	·1403					
16. 5	27. 20	19. 12	·1398					
16. 11	27. 20	19. 34	·1392					
16. 28	24. 0	19. 55	·1394					
16. 43	18. 55	20. 1	·1399					
16. 58	15. 5	20. 6	·1393					
17. 9	13. 50	20. 12	·1396					
17. 21	16. 0	20. 20	·1388					
17. 38	15. 0	20. 34	·1384					
17. 41	12. 15	20. 40	·1388					
17. 46	15. 25	21. 24	·1381					
18. 21	23. 0	23. 11	·1390					
18. 36	25. 25	23. 25	·1388					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 3		Oct. 3						
h m	° ′ ″	h m		h m		h m	°	°
18.41	20.23.40	23.59	·1396					
18.55	23.20							
18.58	24.15							
19.28	26. 0							
19.43	24.30							
19.53	24.40							
19.58	23.20							
20. 8	23.30							
20.11	23. 0							
20.22	24.40							
20.26	24.10							
20.33	25. 5							
20.41	23.40							
20.43	24.40							
20.55	25. 0							
21.11	28. 0							
21.25	28.10							
21.28	26.35							
21.51	27.30							
22. 0	26.40							
22. 8	27.30							
22.11	26.30							
22.21	27.10							
22.33	26.40							
22.59	27.10							
23.11	26.15							
23.27	26. 0							
	***							
23.59	28.30							
Oct. 4		Oct. 4		Oct. 4		Oct. 4		
0. 0	20.28.30	0. 0	·1396	0. 0	·03014	0. 0	63·3	64·2
0. 6	29.40	0.12	·1410	0.57	·03007	1. 0	63·4	64·6
0.10	29.10	0.35	·1390	2.45	·03077	2. 0	63·5	64·7
0.14	32. 5	0.50	·1395	5. 6	·03203	3. 0	63·5	65·7
0.25	30.20	1.20	·1400	5.15	·03268	9. 0	63·5	65·1
0.41	30.20	1.25	·1410	5.18	·03258	20. 0	62·6	64·0
0.52;	27.55	1.40	·1394	5.22	·03266	21. 0	62·9	64·2
1. 6	29. 0	1.45	·1403	5.36	·03156	22. 0	62·6	63·5
1.12	28.10	1.56	·1387	5.43	·03140	23. 0	62·8	63·7
1.20	30.30	2. 6	·1394	5.53	·03097			
1.33	28. 0	2.10	·1393	6. 6	·03105			
1.40	30. 5	2.26	·1407	6.23	·03092			
1.51	29.45	2.36	·1403	6.30	·03096			
1.56	27.50	2.41	·1405	6.54	·03082			
2. 3	28. 5	2.44	·1400	7.12	·03097			
2.13	26.40	2.46	·1403	8.10	·03095			
2.21	28.15	2.57	·1396	9. 0	·03045			
2.33	26. 0	2.58	·1397	9.27	·03052			
2.43	25.20	3. 6	·1390	9.56	·03011			
2.51	27.15	3.11	·1395	10.12	·02943			
2.53	26.50	3.25	·1376	10.26	·02973			
2.58	28.30	3.37	·1383	10.35	·02991			
3. 3	28. 0	3.42	·1381	11. 9	·02963			
3.13	31.30	3.46	·1383	11.27	·02985			
3.39	24.55	3.55	·1395	11.41	·02980			
3.43	24.55	4. 4	·1392	12. 4	·03004			
3.54	28.40	4.13	·1375	12.12	·03004			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 4		Oct. 4		Oct. 4				
h m	° ′ ″	h m		h m		h m	°	°
3.58	20.26.55	4.14	·1373	12.36	·02986			
4. 8	28.50	4.24	·1394	12.43	·02986			
4.13	25.45	4.29	·1404	13.30	·02963			
4.21	20.20	4.35	·1379	13.44	·02978			
4.24	20.40	4.45	·1381	15.58	·02984			
4.28	27.50	4.50	·1379	16.23	·02970			
4.40	21.55	4.57	·1370	17.11	·02976			
4.43	20.25	5. 0	·1377	17.42	·02958			
4.48	21.30	5. 3	·1372	19.14	·03024			
4.51	21.15	5. 6	·1380		***			
4.59	16. 0	5.12	·1378	20. 4	·03015			
5.10	15.15	5.20	·1389	20.54	·03022			
5.23	20. 1. 0	5.27	·1416	23.45	·03014			
5.26	19.49.30	5.42	·1437		(†)			
5.37	20. 7.40	5.55	·1375					
5.48	32.10	6. 7	·1393					
5.56	20. 0	6.20	·1386					
6. 6	22.25	6.36	·1396					
6.13	19.30	6.43	·1392					
6.28	19.20	6.57	·1374					
6.33	18.30	7.20	·1388					
6.43	21.20	7.30	·1377					
7. 4	14. 0	7.42	·1382					
7.13	14. 0	7.44	·1380					
7.18	18.10	7.52	·1388					
7.26	19.10	8. 0	·1382					
7.35	17.30	8. 4	·1386					
7.43	14.10	8.12	·1377					
7.55	19.30	8.23	·1385					
8. 1	19. 0	8.29	·1384					
8.11	15. 0	8.43	·1392					
8.18	15.55	9. 7	·1380					
8.33	13. 5	9.21	·1392					
8.46	17.40	9.40	·1445					
9. 6	15. 0	9.55	·1457					
9.11	20.12.50	10. 9	·1435					
9.28	19.57.10	10.13	·1352					
9.43	20. 7.20	10.43	·1416					
10. 6	20.32.55	10.54	·1405					
10.26	19.59. 0	11. 7	·1376					
10.39	20. 9. 0	11.21	·1364					
10.56	19.30	11.39	·1378					
11. 3	17.20	11.43	·1369					
11.14	15. 0	11.50	·1371					
11.25	12.50	11.56	·1367					
11.38	16.50	12.12	·1372					
11.48	12.10	12.14	·1370					
11.54	13.10	12.15	·1375					
12. 6	17. 0	12.24	·1371					
12.10	17. 0	12.44	·1386					
12.26	31.50	13. 7	·1388					
12.36	30. 0	13.36	·1378					
12.43	31. 0	13.55	·1395					
13. 3	25.30		***					
13.26	20.10	14.21	·1387					
13.47	25.30	14.26	·1389					
13.53	24. 5	14.30	·1384					
13.56	26. 0	14.35	·1389					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 4		Oct. 4						
h m	° ′ ″	h m		h m		h m	°	°
13. 59	20. 25. 30	14. 40	·1382					
14. 3	27. 30	14. 56	·1390					
14. 11	27. 30	15. 13	·1392					
14. 22	29. 30	15. 20	·1397					
14. 29	28. 5	15. 31	·1394					
14. 39	30. 35	15. 37	·1397					
14. 41	31. 5	15. 45	·1387					
15. 3	26. 5	16. 6	·1398					
15. 11	26. 5	16. 13	·1387					
15. 21	21. 5	16. 37	·1380					
15. 27	22. 40	16. 43	·1384					
15. 47	20. 15	16. 54	·1380					
15. 59	24. 0	17. 16	·1391					
16. 29	27. 10	17. 30	·1389					
16. 41	29. 20	17. 40	·1391					
16. 52	29. 30	17. 50	·1385					
17. 18	33. 20	17. 55	·1386					
17. 39	31. 45	18. 3	·1381					
18. 9	27. 5	18. 22	·1380					
18. 22	26. 10	18. 29	·1384					
18. 26	27. 40	18. 41	·1376					
18. 32	25. 25	18. 45	·1379					
18. 55	21. 55	19. 0	·1397					
19. 3	23. 10	19. 10	·1395					
19. 9	22. 20	19. 27	·1404					
19. 13	24. 10		***					
19. 25	25. 0	19. 32	·1397					
19. 33	28. 5	19. 35	·1399					
19. 43	28. 0	19. 47	·1388					
19. 56	26. 50	20. 13	·1374					
20. 12	27. 15	20. 21	·1376					
20. 36	26. 15	20. 28	·1373					
20. 42	27. 5	20. 44	·1376					
21. 26	25. 5	21. 6	·1384					
21. 33	26. 30	21. 27	·1379					
21. 54	25. 30	21. 41	·1383					
	***	21. 56	·1377					
22. 13	26. 10	21. 59	·1378					
22. 23	23. 55	22. 0	·1372					
22. 39	26. 30	22. 27	·1370					
	***	22. 39	·1379					
23. 11	24. 50	22. 43	·1373					
23. 44	25. 30	22. 46	·1383					
23. 54	25. 15	22. 48	·1375					
23. 59	26. 40	22. 52	·1379					
		22. 56	·1370					
		23. 1	·1377					
		23. 5	·1373					
		23. 12	·1373					
		23. 15	·1369					
		23. 20	·1374					
		23. 34	·1372					
		23. 44	·1377					
		23. 56	·1374					
		23. 59	·1377					
Oct. 5		Oct. 5		Oct. 5		Oct. 5		
0. 0	20. 26. 40	0. 0	·1377		(†)	0. 0	63·1	64·0
0. 9	26. 40	0. 11	·1382	1. 0	·03015	1. 0	63·1	64·0

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 5		Oct. 5		Oct. 5		Oct. 5		
h m	° ′ ″	h m		h m		h m	°	°
0. 25	20. 28. 0	0. 12	·1373	1. 16	·03024	2. 0	63·0	63·8
0. 36	27. 0	0. 15	·1377	2. 4	·03024	3. 0	62·9	63·6
0. 42	27. 0	0. 20	·1372	2. 45	·03057	9. 0	62·5	63·5
0. 52	27. 55	0. 24	·1383	4. 22	·03035	20. 0	62·4	63·0
0. 58	27. 55	0. 43	·1384	5. 26	·03032	21. 0	62·1	63·2
1. 9	26. 50	1. 6	·1393	6. 20	·03042	22. 0	62·1	63·5
1. 26	27. 30	1. 12	·1388	7. 6	·03020	23. 0	62·1	63·5
1. 42	28. 55	1. 17	·1394	7. 12	·03037			
2. 4	27. 10	2. 3	·1383	7. 36	·03013			
2. 13	25. 20	2. 17	·1388	8. 12	·02995			
2. 20	21. 45	2. 21	·1384	8. 51	·03003			
2. 38	14. 50	2. 31	·1390	8. 42	·02964			
2. 51	20. 0	2. 54	·1410	11. 11	·02975			
2. 55	19. 55	3. 17	·1394	11. 55	·02915			
3. 2	22. 10	3. 53	·1402	12. 18	·02924			
3. 29	23. 50	4. 3	·1397	12. 43	·02917			
3. 41	23. 30	4. 13	·1400	13. 12	·02938			
3. 44	24. 0	4. 22	·1397	13. 39	·02925			
3. 56	23. 40	4. 26	·1400	15. 42	·02963			
4. 6	24. 30	4. 59	·1387	17. 39	·02958			
4. 15	23. 30	5. 20	·1399	19. 27	·02975			
4. 23	22. 55	5. 42	·1392		***			
4. 28	21. 20	5. 54	·1396	22. 26	·02952			
	***	6. 12	·1386		***			
4. 53	20. 0	6. 24	·1391	23. 59	·02956			
5. 9	21. 5	6. 38	·1392					
5. 37	19. 20	6. 44	·1403					
5. 41	19. 45	7. 0	·1401					
5. 54	19. 10	7. 22	·1441					
6. 3	20. 40	7. 42	·1429					
6. 14	21. 35	7. 55	·1412					
6. 36	13. 40	8. 21	·1392					
6. 43	13. 40	8. 43	·1398					
6. 59	7. 30	8. 52	·1405					
7. 11	1. 0	9. 0	·1402					
7. 14	6. 10	9. 10	·1414					
7. 28	14. 30	9. 19	·1418					
7. 32	14. 30	9. 26	·1410					
7. 43	19. 20	9. 37	·1414					
7. 56	20. 20	9. 47	·1410					
8. 0	19. 55	10. 10	·1404					
8. 6	20. 30	10. 19	·1406					
8. 25	17. 10	10. 34	·1398					
8. 39	17. 30	10. 42	·1400					
8. 49	19. 45	10. 56	·1397					
9. 0	16. 0	11. 12	·1399					
9. 17	22. 5	11. 30	·1410					
9. 24	21. 0	11. 54	·1396					
9. 30	22. 5	11. 59	·1398					
9. 53	21. 50	12. 11	·1394					
10. 2	20. 20	12. 25	·1401					
10. 16	19. 25	12. 34	·1409					
10. 24	18. 0	12. 56	·1399					
10. 42	17. 10	13. 12	·1406					
10. 54	17. 30	13. 44	·1420					
11. 28	32. 5	14. 0	·1409					
11. 36	31. 55	14. 11	·1409					
11. 45	29. 10	14. 25	·1405					
12. 3	27. 55							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V. F. Magnet.	Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 5		Oct. 5							Oct. 6		Oct. 6		Oct. 6		Oct. 6		
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
12.37	20.25. 0	14.35	·1400						0. 0	20.30.40	0. 0	·1375	0. 0	·02956	0. 0	62·1	63·5
12.51	22. 5	14.45	·1398						0. 6	30.50	0.10	·1371	0.13	·02948	1. 0	62·5	63·5
13. 4	21.10	14.55	·1400						0.12	32. 0	0.48	·1389	1.12	·02997	2. 0	62·5	63·5
13.17	23. 0	15.19	·1399						0.19	34. 0	1. 4	·1387	1.53	·02982	3. 0	62·6	64·0
13.26	23. 0	15.25	·1396						0.25	32. 0	1.19	·1394	2.26	·03007	9. 0	62·6	64·0
13.56	20.30	15.43	·1400						0.39	28.20	1.34	·1396	3.54	·03037	20. 0	62·4	63·0
13.59	20.40	15.54	·1398						0.53	27.10	1.40	·1403	4.44	·03007	21.45	62·2	63·4
14.21	18. 0	16. 8	·1405						1. 9	26.50	1.55	·1397	5.12	·03022			
14.39	18.45	16.20	·1399						1.40	30.50	2. 9	·1395	5.42	·02985			
14.44	20. 0	16.45	·1407						1.56	29.30	2.20	·1401	5.57	·03008			
14.54	19.20	16.59	·1402						2.16	29.30	2.41	·1404	6.49	·02983			
15. 3	19.30	17. 6	·1405						2.43	32.10	2.56	·1385	7.56	·02987			
15. 9	20.50	17.26	·1403						2.56	26.40	3.12	·1395	8.10	·02977			
15.21	20. 5	17.39	·1405						3.13	28.25	3.26	·1373	8.20	·02988			
15.38	21.35	18.14	·1394						3.35	19.40	3.59	·1409	8.52	·02970			
15.44	21. 0	18.29	·1400						3.41	19.10	4.21	·1394	9.54	·02962			
15.54	21. 0	18.54	·1394						4. 8	25. 5	4.27	·1390	10.14	·02973			
15.58	22.45	19.15	·1397						4.12	24.55	4.40	·1393	13.25	·02968			
16. 4	22. 0	19.34	·1390						4.21	25.40	4.50	·1386	15. 6	·02974			
16.11	21.45	19.44	·1393						4.33	25.30	5. 5	·1408	16.25	·02946			
16.13	22.50	19.55	·1389						4.42	24. 0	5.20	·1418	16.41	·02956			
16.28	22. 0	20. 7	·1393						4.58	16.50	5.25	·1413	17.59	·02937			
16.41	22. 5	20.15	·1389						5. 4	17.30	5.37	·1408	20.30	·02956			
16.54	21.35	20.26	·1391						5.12	21.55	5.47	·1388	23. 9	·02936			
16.58	22. 5	20.52	·1379						5.28	22.20	5.57	·1418	23.59	·02959			
17.21	21.30	21.19	·1374						5.37	21.45	6.13	·1417					
17.28	22.55	21.24	·1369						5.48	10.30	6.30	·1407					
17.39	21.20	21.35	·1373						5.57	16.25	6.54	·1404					
17.56	22. 0	22. 6	·1371						6.14	20. 0	7.10	·1408					
17.59	23.30	22.13	·1366						6.40	22.10	7.14	·1406					
18.12	22.30	22.29	·1366						6.55	20.35	7.28	·1407					
18.34	25.40	22.43	·1373						7. 6	21. 0	7.56	·1399					
18.55	24.25	23.11	·1374						7.26	19. 0	8.12	·1403					
19. 6	22. 0	23.23	·1367						7.59	21.10	8.25	·1435					
19.26	23. 5	23.43	·1372						8.20	12. 5	8.33	·1425					
19.34	24. 0	23.55	·1382						8.33	19.20	8.56	·1415					
19.42	23. 0	23.59	·1375						8.38	19.50	9.25	·1410					
19.56	23.15								9.39	18.55	9.40	·1413					
20. 9	22.20								9.56	16. 0	9.50	·1405					
20.13	23.40								10.31	22.30	10. 6	·1400					
	***								10.50	22.55	10.26	·1401					
20.39	24.35								11.15	21. 0	10.50	·1407					
	***								11.30	23.20	11. 4	·1405					
20.51	24.30								11.38	23.20	11.20	·1407					
20.56	25.50								12. 7	25. 0	11.35	·1405					
21. 6	25.30								12.12	26. 0	12.13	·1403					
21.56	26.55								12.23	25.40	13.11	·1406					
21.59	25.55								12.30	26.25	13.19	·1403					
22. 9	25.50								13.14	24. 5	13.34	·1407					
22.16	26.20								13.23	24.35	13.45	·1405					
22.26	28. 5								13.41	23.10	14. 1	·1407					
22.39	28. 0								13.50	23.35	14.20	·1401					
22.56	30.10								14.21	22.50	14.43	·1403					
23. 4	30.10								14.30	23.30	15. 3	·1402					
23.27	28.40								14.39	22.40	15.41	·1410					
23.39	29. 5								14.55	23. 0	15.57	·1408					
23.56	31.20								14.58	24.25	16.38	·1386					
23.59	30.40								15.10	24.30	17. 3	·1400					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 6		Oct. 6						
h m	° ′ ″	h m		h m		h m	°	°
15. 21	20. 23. 40	17. 28	·1414					
15. 27	24. 5	17. 57	·1406					
15. 50	23. 40	18. 22	·1391					
16. 7	25. 5	18. 57	·1394					
16. 12	24. 30	19. 20	·1407					
16. 26	24. 35	20. 22	·1398					
16. 44	28. 0	20. 33	·1400					
16. 59	28. 20	20. 40	·1395					
17. 9	27. 20	20. 53	·1398					
17. 23	28. 30	21. 20	·1391					
17. 36	28. 10	21. 44	·1387					
17. 41	27. 30	22. 25	·1394					
17. 56	27. 5	22. 45	·1391					
18. 13	30. 20	22. 52	·1393					
18. 23	29. 50	23. 24	·1380					
18. 45	31. 40	23. 42	·1380					
18. 56	30. 50	23. 50	·1377					
19. 0	28. 40	23. 59	·1381					
19. 6	28. 25							
19. 17	25. 30							
19. 26	25. 0							
19. 41	22. 0							
19. 48	22. 40							
20. 11	21. 30							
20. 26	22. 0							
20. 38	23. 10							
20. 46	22. 0							
20. 58	23. 30							
21. 10	23. 25							
21. 21	22. 0							
	* * *							
22. 11	23. 20							
22. 32	25. 50							
22. 47	25. 20							
22. 59	27. 30							
	* * *							
23. 50	28. 0							
23. 59	29. 10							
Oct. 7		Oct. 7		Oct. 7		Oct. 7		
0. 0	20. 29. 10	0. 0	·1381	0. 0	·02959	1. 0	62·6	63·9
0. 10	29. 25	0. 27	·1376	0. 41	·02973	9. 0	62·6	63·7
0. 17	30. 10	0. 35	·1381	1. 36	·03020	21. 0	61·8	62·6
0. 26	29. 50	0. 43	·1378	1. 42	·03012	22. 0	61·8	62·6
0. 32	30. 55	0. 56	·1386	2. 20	·03060	23. 0	62·0	62·7
0. 37	30. 55	0. 57	·1385	2. 41	·03046			
0. 42	30. 5	1. 6	·1389	3. 0	·03053			
0. 56	31. 0	1. 10	·1384	3. 24	·03037			
1. 9	33. 40	1. 27	·1382	4. 20	·03028			
1. 26	30. 20	1. 40	·1394	4. 56	·03009			
1. 43	34. 40	1. 44	·1388	5. 28	·03013			
1. 54	31. 40	1. 56	·1367	5. 40	·03002			
2. 2	30. 0	2. 20	·1396	6. 6	·03016			
2. 9	25. 40	2. 27	·1395	8. 24	·02989			
2. 13	24. 5	2. 32	·1397	8. 39	·03000			
2. 23	27. 10	2. 47	·1381	9. 4	·02964			
2. 26	27. 0	3. 3	·1387	9. 14	·02983			
2. 37	30. 30	3. 17	·1388	9. 57	·02944			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 7		Oct. 7		Oct. 7				
h m	° ′ ″	h m		h m		h m	°	°
2. 41	20. 30. 30	3. 24	·1382	11. 45	·02953			
2. 48	28. 50	3. 33	·1386	12. 0	·02960			
2. 56	28. 25	3. 40	·1391	12. 30	·02915			
3. 17	30. 35	4. 12	·1403	13. 55	·02938			
3. 26	28. 30	4. 22	·1396	15. 15	·02913			
3. 55	27. 10	4. 43	·1401	16. 10	·02918			
4. 0	26. 0	5. 6	·1400	16. 52	·02900			
4. 21	25. 10	5. 15	·1407	17. 41	·02919			
4. 28	25. 20	5. 24	·1404	21. 59	·02932			
4. 40	24. 30	5. 30	·1406	22. 24	·02916			
4. 43	25. 0	5. 45	·1394	22. 49	·02912			
4. 56	25. 0	6. 3	·1410	23. 59	·02943			
5. 12	23. 30	6. 11	·1402					
5. 33	23. 0	6. 25	·1410					
5. 56	12. 20	6. 30	·1408					
6. 3	14. 0	6. 33	·1410					
6. 9	13. 0	6. 37	·1408					
6. 26	16. 0	6. 50	·1413					
	* * *	7. 13	·1400					
6. 37	16. 0	7. 43	·1408					
7. 9	21. 30	8. 2	·1400					
7. 17	21. 30	8. 14	·1395					
7. 34	23. 35	8. 28	·1402					
8. 11	22. 50	8. 41	·1416					
8. 28	17. 0	8. 50	·1402					
8. 38	20. 20	8. 57	·1397					
8. 56	20. 20. 30	9. 4	·1374					
9. 14	19. 59. 50	9. 25	·1454					
9. 27	20. 12. 0	9. 41	·1443					
9. 42	17. 55	10. 8	·1415					
9. 55	19. 10	10. 29	·1405					
10. 3	18. 10	10. 44	·1409					
10. 25	19. 10	11. 6	·1400					
10. 34	18. 20	11. 16	·1404					
10. 50	20. 5	11. 34	·1399					
11. 19	17. 50	11. 54	·1396					
11. 45	18. 40	12. 10	·1400					
11. 51	19. 25	12. 25	·1419					
12. 6	30. 0	12. 40	·1414					
12. 9	30. 0	12. 54	·1414					
12. 13	32. 15	13. 6	·1406					
12. 33	26. 40	13. 19	·1410					
13. 0	21. 50	13. 50	·1404					
13. 14	22. 30	14. 44	·1415					
13. 41	21. 40	14. 59	·1405					
13. 53	22. 10	15. 8	·1409					
14. 11	20. 15	15. 12	·1400					
14. 24	20. 0	15. 30	·1396					
14. 42	21. 55	16. 0	·1398					
14. 56	21. 10	16. 20	·1407					
15. 8	22. 10	16. 40	·1407					
15. 13	21. 40	16. 43	·1411					
15. 44	27. 40	16. 57	·1399					
16. 11	27. 25	17. 20	·1394					
16. 36	24. 25	17. 42	·1396					
	* * *	17. 55	·1400					
16. 44	25. 15	17. 56	·1399					
16. 57	23. 30	18. 14	·1403					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 7		Oct. 7						
h m	° ′ ″	h m		h m		h m	°	°
17. 12	20. 23. 30	18. 20	·1401					
17. 26	21. 25	18. 39	·1402					
17. 36	21. 55	19. 6	·1407					
17. 41	21. 30	19. 27	·1400					
17. 55	23. 5	19. 54	·1400					
18. 4	22. 50	20. 25	·1386					
18. 14	23. 25	21. 25	·1393					
18. 25	22. 30	22. 4	·1398					
18. 28	23. 0	22. 12	·1404					
18. 43	23. 0	22. 24	·1393					
19. 12	25. 15	22. 40	·1399					
19. 49	24. 20	22. 55	·1397					
20. 3	23. 50	23. 12	·1376					
20. 19	25. 40	23. 26	·1379					
20. 41	25. 0	23. 40	·1372					
20. 58	25. 0	23. 51	·1365					
21. 25	23. 40	23. 59	·1375					
21. 53	25. 0							
22. 4	30. 0							
22. 17	27. 0							
22. 28	30. 30							
22. 46	30. 55							
22. 59	30. 5							
23. 10	31. 0							
23. 16	33. 20							
23. 30	34. 40							
23. 48	31. 25							
23. 56	32. 0							
23. 59	31. 55							
Oct. 8		Oct. 8		Oct. 8		Oct. 8		
0. 0	20. 31. 55	0. 0	·1375	0. 0	·02943	0. 0	62 ·2	63 ·2
0. 25	29. 55	0. 4	·1371	0. 15	·02927	1. 0	62 ·5	63 ·8
0. 42	33. 0	0. 12	·1374	2. 11	·02983	3. 0	62 ·5	64 ·4
0. 56	32. 20	0. 40	·1394	4. 46	·03014	9. 0	62 ·4	63 ·5
1. 1	32. 35	0. 55	·1384	5. 54	·02998	21. 0	61 ·6	62 ·3
1. 26	32. 20	1. 6	·1387	6. 11	·02980	22. 0	61 ·1	62 ·0
1. 29	33. 10	1. 11	·1385	6. 23	·02990	23. 0	61 ·5	62 ·2
1. 38	33. 0	1. 21	·1395	9. 5	·02977			
1. 41	31. 20	1. 55	·1382	9. 52	·02960			
1. 44	32. 5	1. 57	·1385	9. 57	·02960			
1. 53	31. 10	2. 10	·1381	10. 39	·02937			
2. 6	31. 55	2. 12	·1377	12. 0	·02952			
2. 13	29. 55	2. 58	·1397	13. 5	·02943			
2. 29	29. 0	3. 15	·1391	13. 39	·02922			
3. 8	29. 0	3. 35	·1393	13. 50	·02922			
3. 26	27. 20	3. 42	·1389	14. 19	·02904			
3. 33	27. 50	4. 2	·1409	16. 10	·02933			
3. 41	24. 40	4. 12	·1409	19. 57	·02920			
3. 53	22. 30	4. 25	·1399	22. 53	·02896			
3. 59	23. 0	4. 40	·1402	23. 59	·02906			
4. 8	24. 50	4. 56	·1411					
4. 16	24. 50	5. 8	·1405					
4. 33	19. 40	5. 30	·1417					
4. 41	18. 0	5. 37	·1412					
4. 51	19. 45	5. 44	·1420					
5. 4	17. 30	5. 55	·1423					
5. 10	18. 0	6. 5	·1419					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 8		Oct. 8						
h m	° ′ ″	h m		h m		h m	°	°
5. 23	20. 16. 10	6. 11	·1414					
5. 30	13. 35	6. 24	·1426					
5. 39	13. 55	6. 36	·1415					
5. 46	13. 25	6. 42	·1423					
6. 6	6. 10	6. 58	·1414					
6. 23	7. 40	7. 12	·1401					
6. 28	6. 55	7. 20	·1404					
6. 42	12. 50	7. 31	·1396					
6. 46	13. 5	7. 40	·1398					
7. 0	17. 25	7. 42	·1396					
7. 9	17. 15	7. 55	·1400					
7. 16	20. 5	8. 28	·1397					
7. 40	21. 30	8. 41	·1405					
7. 56	23. 10	9. 14	·1408					
8. 20	22. 0		***					
8. 33	19. 20	9. 49	·1405					
8. 43	20. 30	10. 9	·1421					
8. 58	20. 30	10. 20	·1425					
9. 13	23. 0	10. 39	·1414					
9. 34	23. 50	11. 14	·1404					
9. 43	23. 5	12. 39	·1412					
10. 15	25. 30	13. 3	·1408					
10. 44	22. 0	13. 28	·1410					
11. 44	22. 55	13. 53	·1405					
11. 58	22. 25	14. 8	·1401					
12. 41	24. 25	14. 23	·1408					
12. 56	22. 35	14. 44	·1409					
13. 20	26. 30	15. 13	·1403					
13. 39	23. 10	15. 56	·1402					
13. 43	23. 55	16. 11	·1406					
13. 51	24. 0	16. 23	·1402					
14. 8	29. 20	16. 40	·1410					
14. 15	29. 30	16. 51	·1402					
14. 33	25. 10	17. 10	·1408					
14. 56	23. 55	17. 33	·1407					
15. 9	22. 20	17. 58	·1394					
15. 25	21. 30	18. 29	·1390					
15. 33	20. 20	19. 8	·1399					
15. 59	20. 40	19. 27	·1392					
16. 17	22. 35	19. 39	·1397					
16. 33	20. 40	19. 44	·1391					
16. 41	22. 30	20. 43	·1401					
17. 4	21. 10	21. 36	·1392					
17. 10	21. 40	22. 3	·1389					
17. 34	21. 0	22. 27	·1389					
17. 59	23. 25	22. 51	·1380					
18. 6	23. 20	23. 6	·1383					
18. 25	25. 5	23. 13	·1380					
18. 43	28. 55	23. 43	·1395					
18. 55	27. 45	23. 53	·1385					
19. 10	28. 55	23. 59	·1392					
19. 26	26. 5							
19. 33	27. 40							
	***							
19. 55	25. 25							
	***							
20. 21	25. 25							
20. 28	26. 55							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁏ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 8								
h m	° ′ ″	h m		h m		h m	°	°
20. 54	20. 27. 30							
21. 3	26. 30							
	***							
21. 47	27. 25							
22. 14	28. 35							
22. 26	28. 20							
22. 58	29. 40							
23. 11	29. 20							
23. 26	29. 20							
23. 30	30. 20							
23. 36	28. 30							
23. 59	28. 25							
Oct. 9		Oct. 9		Oct. 9		Oct. 9		
0. 0	20. 28. 25	0. 0	·1392	0. 0	·02906	0. 0	61 ·7	62 ·6
0. 17	29. 0	0. 39	·1401	3. 39	·02973	1. 0	62 ·1	63 ·0
0. 26	28. 50	0. 57	·1396	3. 54	·02966	2. 0	62 ·0	63 ·0
0. 48	30. 0	1. 35	·1404	4. 14	·02997	3. 0	61 ·8	63 ·0
1. 9	28. 20	2. 3	·1404	5. 12	·02960	9. 0	61 ·4	62 ·6
1. 26	29. 25	2. 14	·1396	9. 41	·02920	21. 0	60 ·9	62 ·0
1. 51	29. 30	2. 25	·1394	9. 53	·02928	22. 0	61 ·0	62 ·0
1. 58	30. 10	2. 34	·1397	10. 8	·02892	23. 0	61 ·2	62 ·2
2. 11	29. 10	2. 54	·1386	10. 55	·02857			
2. 17	29. 30	3. 17	·1399	12. 6	·02886			
2. 24	29. 0	3. 23	·1392	13. 11	·02892			
2. 27	30. 0	3. 34	·1391	14. 36	·02870			
2. 41	30. 0	3. 40	·1374	15. 22	·02838			
2. 46	29. 30	3. 50	·1366	16. 41	·02828			
2. 56	26. 25	4. 12	·1404	17. 12	·02817			
3. 12	27. 45	4. 29	·1410	17. 42	·02800			
3. 21	26. 30	4. 54	·1402	18. 3	·02817			
3. 26	26. 30	5. 56	·1407	18. 33	·02800			
3. 33	25. 20	6. 17	·1401	19. 40	·02839			
3. 41	22. 0	6. 40	·1404		***			
3. 53	15. 45	6. 56	·1397	23. 59	·02859			
3. 59	14. 20	7. 8	·1405					
4. 20	18. 30	7. 17	·1404					
4. 39:	23. 25	7. 29	·1412					
4. 58	24. 45	8. 10	·1409					
5. 14	24. 30	8. 47	·1410					
5. 25	24. 50	8. 59	·1406					
5. 54	23. 0	9. 28	·1407					
6. 8:	23. 10	9. 41	·1414					
6. 33	21. 30	9. 52	·1434					
6. 52	19. 20	10. 23	·1443					
6. 57	17. 5	10. 43	·1424					
7. 4	17. 25	10. 55	·1423					
7. 22	15. 30	11. 14	·1402					
7. 34	18. 20	11. 37	·1394					
8. 15	22. 45	12. 6	·1405					
8. 44	22. 35	13. 3	·1409					
9. 41	20. 40	13. 11	·1407					
9. 53	23. 50	13. 23	·1410					
10. 6	19. 25	13. 56	.1409					
10. 26	22. 10	14. 11	·1398					
10. 56:	17. 45	14. 58	·1423					
11. 6	18. 50	15. 27	·1425					
11. 11	18. 40	15. 44	·1410					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 9		Oct. 9						
h m	° ′ ″	h m		h m		h m		°
11. 17	20. 20. 10	15. 59	·1405					
11. 26	21. 0	16. 11	·1405					
11. 37	19. 55	16. 28	·1398					
12. 21	22. 30	16. 39	·1400					
12. 34	21. 55	17. 11	·1390					
12. 55	21. 20	17. 25	·1390					
13. 11	19. 5	17. 36	·1382					
13. 28	18. 20	17. 51	·1381					
13. 38	17. 0	18. 17	·1418					
13. 50	16. 20	18. 26	·1420					
14. 6	21. 55	18. 34	·1411					
14. 12	24. 0	18. 55	·1414					
14. 21	23. 55	19. 23	·1403					
14. 39	26. 25	19. 35	·1409					
14. 55	26. 25	20. 13	·1398					
15. 19	21. 0	21. 39	·1393					
15. 28	22. 30	21. 53	·1389					
15. 36	24. 10	22. 9	·1387					
15. 44	25. 10	22. 14	·1379					
15. 55	24. 45	22. 20	·1381					
16. 7	26. 30	22. 26	·1374					
16. 37	33. 25		***					
16. 43	34. 0	22. 59	·1381					
16. 56	33. 5	23. 14	·1379					
17. 6	33. 40	23. 23	·1384					
17. 9	35. 20	23. 26	·1380					
17. 24	35. 5	23. 42	·1390					
17. 28	35. 40		***					
17. 34	32. 50	23. 59	·1389					
17. 43	32. 20							
17. 55	34. 0							
	***							
18. 14	35. 35							
18. 22	33. 55							
18. 26	34. 20							
18. 33	29. 30							
18. 44	26. 35							
19. 7	24. 0							
19. 23	23. 20							
19. 33	25. 40							
19. 46	25. 55							
20. 0:	22. 55							
20. 13	21. 55							
20. 24	22. 0							
21. 8	23. 0							
21. 32	25. 20							
21. 41	24. 5							
21. 51	24. 30							
22. 3	27. 10							
22. 7	26. 10							
22. 11	27. 10							
22. 18	28. 55							
	***							
22. 43	28. 0							
	***							
22. 53	27. 40							
22. 57	28. 10							
	***							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 9								
h m	° ′ ″	h m		h m		h m	°	°
23. 20	20. 26. 40							
	***							
23. 33	28. 35							
	***							
23. 52	28. 0							
23. 59	28. 0							
Oct. 10		Oct. 10		Oct. 10		Oct. 10		
0. 0	20. 28. 0	0. 0	·1389	0. 0	·02857	0. 0	61 ·4	62 ·7
0. 25	27. 25	0. 33	·1396	1. 23	·02903	1. 0	61 ·5	62 ·9
0. 29	28. 30	0. 53	·1394	5. 56	·02900	2. 0	61 ·4	63 ·0
0. 33	28. 0	1. 7	·1365	6. 28	·02918	3. 0	61 ·5	62 ·6
0. 53	31. 25	1. 25	·1388	6. 53	·02903	9. 0	61 ·3	62 ·8
0. 58	30. 50	1. 27	·1382	7. 52	·02892	10. 45	61 ·3	62 ·2
1. 9	26. 40	1. 34	·1388	8. 11	·02902	21. 0	60 ·6	61 ·1
1. 18	23. 40	1. 41	·1386	8. 34	·02840	22. 0	60 ·6	61 ·1
1. 24	24. 55	2. 16	·1405	8. 45	·02842	23. 0	60 ·6	61 ·2
1. 27	23. 40	3. 26	·1408	9. 12	·02832			
1. 39	22. 35	3. 42	·1404	10. 33	·02864			
1. 43	21. 0	4. 54	·1406	11. 42	·02873			
1. 51	21. 55	5. 8	·1409	12. 41	·02856			
1. 55	20. 40	5. 21	·1401	13. 6	·02860			
2. 7	21. 30	5. 36	·1406	13. 57	·02844			
	***	5. 56	·1396	15. 14	·02816			
2. 26	24. 25	6. 26	·1415	16. 41	·02833			
2. 47	26. 0	6. 44	·1404	21. 44	·02822			
3. 14	26. 0	7. 16	·1422	23. 12	·02800			
4. 11	25. 0	7. 38	·1413	23. 18	·02805			
4. 25	25. 30	7. 44	·1403	23. 23	·02807			
4. 53	24. 40	7. 59	·1398	23. 42	·02858			
5. 0	24. 55	8. 14	·1424	23. 59	·02863			
5. 23	22. 45	8. 29	·1395					
5. 28	23. 20	8. 42	·1414					
5. 41	23. 0	9. 19	·1384					
6. 3	15. 55	9. 32	·1414					
6. 13	15. 0	9. 56	·1398					
6. 36	21. 30	10. 51	·1408					
6. 42	21. 40	11. 26	·1401					
6. 56	18. 25	12. 11	·1416					
7. 11	17. 55	12. 28	·1413					
7. 21	18. 30	12. 43	·1405					
7. 38	17. 10	13. 14	·1406					
7. 53	14. 10	13. 28	·1401					
8. 6	19. 20	13. 41	·1405					
8. 13	27. 30	13. 54	·1398					
8. 25	29. 0	13. 59	·1401					
8. 40	19. 20	14. 10	·1398					
8. 44	21. 0	14. 53	·1415					
8. 52	21. 30	15. 9	·1416					
8. 57	20. 0	15. 17	·1412					
9. 3	25. 10	15. 26	·1417					
	(†)	16. 14	·1408					
9. 14	24. 0	16. 40	·1397					
9. 31	11. 10	18. 12	·1413					
9. 36	15. 30	18. 23	·1409					
9. 51	19. 20	19. 9	·1409					
9. 57	18. 55	19. 57	·1404					
10. 25	20. 10	20. 6	·1399					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 10		Oct. 10						
h m	° ′ ″	h m		h m		h m	°	°
10. 29	20. 19. 35	20. 21	·1407					
10. 53	20. 25	21. 4	·1390					
11. 14	21. 55	21. 28	·1385					
11. 27	21. 5		***					
11. 52	22. 40	22. 26	·1393					
11. 59	22. 0	22. 52;	·1386					
12. 11	24. 20	23. 2	·1374					
12. 25	26. 0	23. 6	·1349					
12. 42	24. 0	23. 10	·1358					
13. 6	26. 20	23. 21	·1348					
13. 39	22. 0	23. 32	·1359					
13. 53	26. 20	23. 53	·1364					
13. 59	27. 0	23. 59	·1357					
14. 28	33. 15							
15. 6	25. 0							
15. 9	24. 30							
15. 14	22. 20							
15. 40	20. 0							
	***							
16. 8	20. 25							
16. 21	22. 40							
16. 25	22. 20							
16. 42	23. 10							
16. 54	25. 0							
17. 10	27. 0							
17. 39	27. 30							
17. 57	26. 0							
18. 11	27. 5							
19. 3	28. 10							
19. 8	27. 10							
19. 18	26. 5							
19. 23	26. 40							
19. 28	25. 30							
19. 44	22. 40							
19. 53	23. 40							
19. 57	22. 15							
20. 11	25. 0							
20. 14	25. 10							
20. 18	26. 25							
20. 26	25. 30							
20. 38	25. 5							
20. 43	25. 40							
20. 46	24. 20							
21. 4	25. 30							
21. 11	25. 10							
21. 15	27. 10							
21. 22	25. 55							
21. 56	24. 20							
22. 3	25. 30							
22. 14	25. 30							
22. 21	28. 40							
22. 34	30. 0							
22. 43	29. 5							
22. 56	31. 10							
23. 3	28. 10							
23. 14	27. 10							
23. 37	35. 35							
23. 49	34. 40							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 10								
h m	° ′ ″	h m		h m		h m	°	°
23. 55	20. 33. 30							
23. 59	32. 25							
Oct. 11		Oct. 11		Oct. 11		Oct. 11		
0. 0	20. 32. 25	0. 0	·1357	0. 0	·02863	1. 0	60·8	62·0
0. 6	33. 5	0. 23	·1367	0. 22	·02872	2. 0	60·9	62·1
0. 21	30. 0		(†)		(†)	3. 0	61·3	62·2
0. 26	29. 5	1. 0	·1385*	1. 0	·02886*	9. 0	61·1	62·2
0. 31	29. 40	3. 0	·1409*	3. 0	·03025*	21. 0	60·1	61·0
	(†)	3. 21	·1385	3. 21	·03074	22. 0	60·2	61·0
1. 0	29. 32*	3. 27	·1381	5. 6	·02943	23. 0	60·2	61·0
3. 0	22. 41*	3. 33	·1384	6. 57	·02897			
4. 43	15. 40	3. 38	·1370	7. 22	·02906			
4. 56	24. 0	3. 41	·1387	7. 45	·02894			
5. 5	24. 30	3. 50	·1383		(†)			
5. 13	28. 10	3. 58	·1430	9. 0	·02849*			
5. 26	26. 30	4. 11	·1420	9. 44	·02782			
5. 39	27. 0	4. 28	·1390	9. 55	·02760			
5. 52	25. 0	4. 41	·1392	10. 43	·02808			
6. 4	25. 0	4. 51	·1389	13. 22	·02823			
6. 23	20. 20	5. 3	·1391	13. 49	·02832			
6. 34	11. 50	5. 17	·1383	16. 26	·02803			
6. 56	21. 30	5. 26	·1390	17. 36	·02820			
7. 3	17. 40	5. 41	·1385	22. 10	·02817			
7. 12	18. 0	6. 0	·1387	23. 19	·02802			
7. 15	17. 30	6. 15	·1386		***			
7. 23	18. 0	6. 38:	·1417	23. 39	·02817			
7. 30	16. 30	6. 56	·1384	23. 59	·02826			
7. 43	9. 50	7. 11	·1392					
8. 2	7. 0	7. 29	·1369					
8. 28	16. 55	8. 14	·1401					
8. 44	17. 0	8. 24	·1396					
8. 58	21. 40	8. 36	·1401					
9. 9	20. 15	8. 53	·1418					
9. 18	36. 15	9. 11	·1384					
9. 26	32. 20	9. 28	·1403					
9. 28	31. 0	9. 37	·1388					
9. 36	26. 0	9. 42	·1397					
9. 43	23. 40	9. 47	·1393					
10. 4	36. 20	9. 58	·1415					
10. 12:	28. 50	10. 14	·1391					
10. 36	22. 0	10. 37	·1402					
10. 48	22. 10	11. 41	·1407					
11. 3:	23. 55	12. 21	·1405					
11. 19	22. 5	12. 44	·1397					
11. 48:	19. 0	13. 26	·1399					
12. 20	21. 45	13. 53	·1395					
12. 44	22. 20	14. 11	·1398					
12. 59	24. 0	14. 28	·1395					
13. 8	22. 45	14. 41	·1396					
13. 15	23. 0	14. 56	·1390					
13. 23	22. 0	15. 24	·1402					
13. 33	23. 0	15. 50	·1406					
13. 56	27. 0	16. 10	·1405					
14. 11	26. 0	16. 43	·1393					
15. 3	29. 0	17. 13	·1394					
15. 12	27. 50	18. 37	·1409					
15. 17	27. 55	18. 56	·1405					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 11		Oct. 11						
h m	° ′ ″	h m		h m		h m	°	°
15. 35	20. 26. 0	19. 9	·1406					
15. 56	25. 35	19. 26	·1399					
16. 26	27. 10	20. 26	·1391					
16. 39	26. 15	20. 42	·1395					
16. 56	26. 30	20. 53	·1393					
17. 11	28. 15	21. 4	·1393					
17. 18	27. 45	21. 41	·1383					
17. 25	27. 45	21. 47	·1386					
17. 41	25. 30	22. 2	·1384					
18. 3	23. 50	22. 17	·1394					
18. 43	26. 5	22. 29	·1389					
18. 58	25. 15	22. 39	·1392					
19. 9	26. 5	22. 49	·1385					
19. 14	25. 55	23. 2	·1388					
19. 22	24. 40	23. 26	·1368					
19. 34	23. 55	23. 37	·1371					
20. 0	26. 20	23. 44	·1361					
20. 19	25. 25		***					
21. 23	25. 15	23. 59	·1352					
21. 39	25. 55							
21. 58	25. 15							
	***							
22. 23	29. 30							
22. 36	30. 50							
	***							
22. 56	29. 45							
23. 4	30. 50							
	***							
23. 13	31. 10							
23. 24	34. 0							
23. 28	34. 50							
23. 41	33. 40							
23. 48	30. 50							
23. 55	29. 30							
23. 59	27. 30							
Oct. 12		Oct. 12		Oct. 12		Oct. 12		
0. 0	20. 27. 30	0. 0	·1352	0. 0	·02826	0. 0	60·3	61·0
0. 8	27. 40	0. 7	·1355	0. 14	·02848	1. 0	60·7	62·1
0. 15	27. 10	0. 9	·1350		(†)	2. 0	60·9	62·1
	(†)	0. 17	·1364	1. 0	·02863*	3. 0	61·1	62·2
1. 0	33. 20*	0. 23	·1358	3. 0	·02922*	9. 0	60·5	61·5
2. 44	34. 0		(†)	9. 0	·02846*	21. 0	58·7	58·7
3. 24:	27. 10	1. 0	·1390*	21. 0	·02716*	22. 0	58·8	59·2
4. 14	24. 20	3. 0	·1391*			23. 0	59·0	60·0
4. 26	25. 0	4. 0	·1400					
5. 10:	23. 25	5. 11	·1402					
5. 43	23. 30	5. 53	·1393					
5. 53	20. 21. 30	6. 11	·1372					
6. 32	19. 49. 0	6. 39	·1449					
6. 54:	20. 9. 20	7. 25	·1401					
8. 3	22. 40	7. 40	·1399					
8. 54:	20. 40	7. 59	·1392					
9. 12	18. 30	8. 23	·1401					
9. 26	19. 0	9. 9	·1400					
9. 36	15. 15	9. 54	·1405					
9. 47	21. 30	10. 26	·1403					
9. 56	20. 10	10. 59	·1410					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

October 12. The V. F. photographic trace was too faint for use.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 12		Oct. 12						
h m	° ′ ″	h m		h m		h m	°	°
10. 21	20. 24. 50	11. 26	·1408					
10. 51	21. 10	12. 3	·1395					
11. 10	21. 35	12. 42	·1400					
11. 31	20. 0	13. 0	·1399					
12. 14	28. 15	13. 25	·1401					
12. 50:	24. 50	13. 59	·1406					
13. 25	27. 30	14. 32	·1397					
13. 42	24. 0	14. 56	·1397					
14. 3	22. 15	15. 44	·1405					
14. 11	24. 10	18. 32	·1402					
14. 30	30. 0	18. 59	·1393					
14. 38	30. 20	20. 9	·1399					
15. 44	23. 0	20. 54	·1396					
16. 36	24. 30	21. 14	·1383					
16. 57	22. 50	21. 26	·1384					
17. 39	24. 15	21. 29	·1391					
17. 56	23. 50		(†)					
18. 11	24. 15							
18. 33	23. 25							
18. 51	24. 10							
19. 3	23. 45							
19. 26	24. 0							
19. 53	23. 0							
20. 11	23. 10							
20. 23	24. 15							
20. 38	23. 45							
20. 44	24. 0							
20. 56	26. 20							
21. 21	25. 45							
21. 26	27. 30							
	(†)							
Oct. 13		Oct. 13		Oct. 13		Oct. 13		
	(†)		(†)		(†)	0. 0	59 ·3	59 ·5
1. 0	20. 29. 43*	1. 0	·1398*	1. 0	·02713*	1. 0	59 ·3	59 ·8
2. 40	25. 20	2. 41	·1404	2. 54	·02764	3. 0	59 ·6	60 ·3
2. 52	24. 20	3. 12	·1397	8. 22	·02757	9. 0	59 ·6	60 ·6
3. 7	25. 0	3. 58	·1411	10. 32	·02737	21. 30	59 ·2	60 ·0
3. 18	23. 5	4. 14	·1404	11. 41	·02728			
3. 28	23. 10	4. 32	·1404	12. 20	·02684			
3. 36	22. 15	4. 47	·1415	13. 0	·02689			
3. 41	22. 25	5. 12	·1408	14. 11	·02652			
4. 19	21. 30	5. 41	·1407	15. 23	·02646			
4. 30	19. 10	6. 14	·1416	16. 11	·02680			
4. 36	19. 0	7. 16	·1409	20. 19	·02737			
5. 13	21. 50	7. 38	·1414	22. 23	·02712			
5. 25	21. 15	8. 8	·1415		(†)			
5. 38	21. 40	8. 25	·1411					
5. 51	19. 45	8. 35	·1415					
6. 13	19. 5	8. 43	·1413					
6. 26	19. 40	8. 56	·1414					
6. 39	20. 10	9. 9	·1407					
7. 11	23. 20	9. 25	·1410					
7. 26	22. 55	9. 41	·1407					
7. 51	23. 0	10. 8	·1420					
8. 26	22. 5	10. 29	·1421					
8. 41	22. 15	10. 53	·1405					
8. 47	20. 0	11. 23	·1408					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 13		Oct. 13						
h m	° ′ ″	h m		h m		h m	°	°
9. 13	20. 16. 20	11. 38	·1402					
9. 37	19. 25	11. 53	·1404					
9. 55	20. 15	12. 8	·1418					
10. 25	16. 0	12. 26	·1426					
10. 52	17. 55	13. 8	·1401					
11. 7	15. 45	13. 26	·1408					
11. 28	18. 0	13. 56	·1402					
11. 36	18. 10	14. 8	·1405					
11. 49	22. 10	14. 28	·1399					
11. 56	22. 30	15. 21	·1411					
12. 6	24. 25	15. 51	·1389					
12. 14	25. 30	16. 1	·1392					
12. 34	19. 0	16. 11	·1389					
13. 8	18. 20	16. 53	·1408					
13. 21	19. 30	17. 10	·1406					
13. 42	25. 0	17. 41	·1408					
13. 58	22. 55	17. 50	·1414					
14. 8	23. 10	18. 3	·1410					
14. 23	27. 30	18. 11	·1414					
14. 39	29. 0	18. 33	·1410					
14. 51	26. 30	18. 58	·1408					
15. 9	28. 20	19. 23	·1399					
15. 26	24. 30	19. 51	·1399					
15. 40	24. 5	20. 3	·1402					
15. 56	28. 55	20. 14	·1397					
16. 9	30. 20	20. 38	·1398					
16. 16	30. 0	20. 43	·1393					
16. 26	26. 40	20. 51	·1396					
16. 43	27. 5	20. 57	·1393					
17. 26	25. 30	21. 39	·1393					
17. 36	25. 30	22. 26	·1389					
17. 39	27. 0		(†)					
17. 58	25. 25							
18. 12	24. 55							
18. 38	22. 0							
19. 3	22. 5							
19. 27	21. 0							
	***							
19. 55	21. 25							
20. 9	20. 40							
20. 41	21. 5							
20. 43	22. 20							
20. 53	21. 30							
21. 4	21. 20							
21. 11	21. 30							
21. 21	22. 55							
21. 26	22. 25							
21. 54	23. 45							
21. 57	23. 20							
22. 11	24. 45							
22. 22	24. 20							
	(†)							
Oct. 14		Oct. 14		Oct. 14		Oct. 14		
	(†)		(†)		(†)	1. 0	60 ·1	61 ·5
0. 51	20. 28. 40	0. 56	·1401	1. 0	·02744*	8. 30	59 ·6	61 ·0
0. 59	29. 30	1. 21	·1402	1. 58	·02788	21. 0	57 ·8	58 ·8
1. 22	27. 15	1. 41	·1396	7. 56	·02758	22. 0	58 ·1	58 ·7

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Oct. 14		Oct. 14		Oct. 14		Oct. 14			Oct. 15		Oct. 15		Oct. 15		Oct. 15		
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
1. 26	20. 28. 0	1. 59	·1403	12. 41	·02729	23. 0	58·0	58·7	1. 9	20. 28. 0	2. 41	·1405	3. 34	·02722	2. 0	58·8	60·4
1. 58	27. 55	2. 14	·1404	14. 54	·02696				1. 23	28. 0	3. 1	·1405	11. 17	·02697	3. 0	58·8	59·8
2. 17	26. 5	2. 32	·1409	21. 14	·02660				1. 42	28. 30	3. 34	·1412	14. 19	·02715	9. 0	59·2	59·7
2. 29	25. 30	2. 50	·1401	23. 12	·02637				2. 32	27. 55	5. 23	·1419	18. 12	·02713	21. 0	58·0	57·8
2. 39	24. 10	3. 4	·1406		(†)				2. 43	26. 5	5. 41	·1415		(†)	22. 0	58·0	58·3
2. 41	24. 10	4. 33	·1408						2. 55	25. 55	6. 26	·1418	21. 9	·02664*	23. 0	58·2	57·5
2. 53	21. 25	4. 51	·1401						3. 9	23. 55	6. 41	·1413	23. 16	·02620			
3. 13	24. 25	5. 22	·1402						3. 56	22. 30	7. 1	·1415	23. 59	·02624			
3. 30	23. 50	5. 41	·1413						4. 6	22. 30	7. 39	·1409					
3. 43	24. 0	6. 4	·1412						4. 16	21. 40	8. 6	·1409					
4. 41	23. 0	6. 34	·1415						4. 24	21. 40	8. 50	·1417					
4. 55	21. 10	6. 53	·1412						4. 33	20. 25	8. 55	·1424					
5. 9	21. 30	7. 21	·1420						5. 11	21. 40	9. 23	·1419					
5. 30	18. 50	7. 51	·1413						5. 21	20. 55	9. 33	·1419					
6. 7	22. 55	8. 16	·1416						5. 29	21. 5	9. 55	·1411					
6. 53	21. 0	8. 26	·1415						6. 3	23. 15	10. 16	·1429					
7. 6	19. 50	9. 13	·1412						6. 23	22. 30	11. 12	·1411					
7. 33	21. 50	11. 9	·1411						6. 58	22. 25	11. 35	·1412					
7. 40	21. 50	11. 34	·1418						7. 9	23. 10	12. 11	·1407					
8. 6	23. 5	12. 13	·1411						8. 4	20. 30	14. 34	·1407					
10. 41	22. 30	12. 43	·1419						8. 13	21. 10	15. 29	.1411					
11. 28	23. 20	13. 17	·1418						8. 37	21. 30	17. 41	·1414					
11. 52	21. 55	13. 52	·1407						8. 52	18. 50		(†)					
11. 56	22. 0	14. 17	·1419						9. 12	23. 0	21. 0	·1399*					
12. 8	21. 15	14. 53	·1416						9. 36	20. 0	23. 14	·1398					
12. 56	25. 0	15. 26	·1406						9. 51	20. 0	23. 59	·1396					
13. 27	19. 45	16. 24	·1419						10. 4	17. 15							
13. 40	23. 5	16. 51	·1419						10. 37	21. 25							
14. 9	24. 15	17. 21	·1412						10. 55	21. 40							
14. 50	20. 15	17. 53	·1416						11. 20	20. 30							
15. 4	20. 15	18. 57	·1406						11. 42:	22. 30							
15. 49	24. 15	19. 58	·1406						11. 56	22. 5							
16. 41	22. 0	20. 13	·1399						13. 6	23. 55							
16. 56	22. 5	20. 23	·1401						13. 55	22. 25							
17. 52	23. 45	20. 54	·1397						14. 9	23. 35							
18. 25	22. 10	22. 23	·1394						14. 23	23. 45							
18. 33	22. 50	23. 2	·1396						14. 36	23. 10							
18. 43	22. 30	23. 17	·1394						15. 7	23. 55							
18. 51	22. 55		(†)						15. 23	23. 5							
18. 56	22. 0								15. 53	23. 5							
19. 8	21. 45								16. 26	24. 20							
19. 51	22. 55								17. 5	23. 50							
19. 58	23. 30								17. 24	23. 50							
20. 11	22. 45								17. 38	24. 20							
20. 20	23. 5								17. 56	23. 50							
20. 40	22. 5								20. 6	22. 20							
21. 4	22. 0								21. 7	23. 5							
21. 13	22. 50									(†)							
21. 18	22. 40								23. 15	29. 30							
22. 15	25. 40								23. 26	29. 10							
22. 49	28. 50								23. 35	29. 55							
23. 12	29. 5								23. 41	29. 45							
	(†)								23. 45	30. 40							
									23. 59	30. 35							
Oct. 15		Oct. 15		Oct. 15		Oct. 15			Oct. 16		Oct. 16		Oct. 16		Oct. 16		
	(†)		(†)		(†)	0. 0	58·5	59·6	0. 0	20. 30. 35	0. 0	·1396	0. 0	·02624	0. 0	57·8	58·[illegible]
1. 0	20. 28. 25*	1. 0	·1402*	0. 58	·02682	1. 0	58·9	60·2	0. 11	30. 40		(†)	2. 0	·02663	1. 0	58·7	58·[illegible]

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Oct. 16		Oct. 16		Oct. 16		Oct. 16		
h m	° ′ ″	h m		h m		h m	°	°
1. 17	20. 29. 30	1. 0	·1405	6. 16	·02697	2. 0	58·8	59·0
1. 49	29. 30	1. 59	·1411	10. 24	·02658	3. 0	58·9	60·0
2. 47	26. 10	3. 13	·1414	11. 53	·02677	9. 0	58·5	59·3
3. 54:	24. 45	3. 47	·1410	12. 35	·02663	21. 0	59·6	61·0
5. 3	23. 30	4. 56	·1412	13. 11	·02680	22. 0	59·3	60·2
5. 26	20. 25	5. 29	·1404	15. 41	·02697	23. 0	59·3	60·0
5. 29	20. 25	6. 20	·1416	19. 54	·02700			
5. 41:	18. 10	6. 43	·1414	21. 53	·02717			
5. 55	17. 15	7. 55	·1421	23. 59	·02688			
6. 11	19. 50	8. 39	·1420					
6. 37	23. 15	9. 20	·1416					
6. 54	23. 50	9. 26	·1416					
7. 39	22. 55	9. 37	·1410					
9. 8	22. 40	9. 52	·1418					
9. 21	21. 55	10. 10	·1410					
9. 41	22. 10	10. 21	·1418					
10. 17	13. 40	10. 38	·1421					
10. 37	7. 0	11. 6	·1406					
10. 50	7. 40	11. 41	·1409					
11. 33	21. 10	11. 53	·1407					
11. 43	21. 45	12. 26	·1419					
12. 3	25. 0	12. 51	·1407					
12. 13	24. 25	13. 0	·1406					
12. 32	20. 30	13. 11	·1409					
12. 49	20. 30	14. 41	·1406					
12. 59:	23. 5	14. 59	·1401					
13. 21	21. 40	15. 29	·1408					
13. 29	21. 40	15. 54	·1420					
13. 49	20. 15	16. 10	·1420					
14. 6	22. 45	16. 26	·1423					
14. 14	22. 0	17. 20	·1419					
14. 42	21. 50	18. 21	·1422					
15. 18	25. 55	18. 53	·1416					
15. 24	25. 50	19. 13	·1413					
15. 35	27. 35	19. 57	·1400					
15. 48	26. 25	20. 42	·1396					
15. 57	24. 0	21. 3	·1404					
16. 7	23. 55	22. 17	·1389					
16. 21	24. 40	23. 7	·1389					
16. 54	22. 0	23. 47	·1395					
16. 59	22. 0	23. 59	·1395					
17. 29	23. 10							
17. 49	22. 10							
18. 7	23. 35							
18. 29	23. 50							
18. 41	24. 20							
19. 0	24. 10							
19. 29	25. 45							
19. 42	26. 55							
19. 58	26. 45							
20. 24	28. 10							
20. 41	25. 35							
21. 8	26. 25							
21. 36	25. 25							
21. 53	25. 25							
22. 6	26. 10							
22. 14	25. 40							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V.F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Oct. 16								
h m	° ′ ″	h m		h m		h m	°	°
22. 33	20. 26. 35							
23. 59	27. 10							
Oct. 17		Oct. 17		Oct. 17		Oct. 17		
0. 0	20. 27. 10	0. 0	·1395	0. 0	·02688	0. 0	59·3	60·0
0. 38	27. 20	0. 32	·1397	4. 56	·02726	1. 0	59·5	60·6
0. 43	26. 55	0. 59	·1405	8. 43	·02718	2. 0	59·7	60·6
0. 53	28. 15	1. 25	·1400	9. 56	·02695	3. 0	59·6	60·5
0. 56	28. 0	1. 59	·1406	14. 11	·02692	9. 0	59·0	60·0
1. 7	28. 45	2. 10	·1405	14. 42	·02669	21. 0	58·8	60·1
1. 27	27. 20	2. 25	·1400	18. 10	·02676	22. 0	58·8	60·1
1. 38	27. 55	2. 44	·1407	21. 12	·02700	23. 0	59·1	60·5
1. 44	27. 0	3. 43	·1399	22. 40	·02693			
1. 53	27. 20	4. 3	·1406		(†)			
2. 26	26. 20	4. 27	·1406					
2. 51	26. 20	4. 47	·1399					
3. 55	23. 25	4. 58	·1405					
4. 28	23. 15	5. 10	·1403					
4. 41	24. 20	5. 55	·1416					
5. 9	22. 20	7. 11	·1419					
5. 20	20. 55	7. 26	·1416					
5. 33	22. 0	7. 40	·1419					
5. 56	22. 55	8. 5	·1416					
7. 4	22. 30	8. 33	·1416					
7. 35	22. 50	8. 54	·1432					
7. 41	22. 20	9. 21	·1422					
7. 58	23. 0	9. 33	·1424					
8. 11	22. 30	9. 48	·1418					
8. 25	22. 45	10. 26	·1413					
8. 54	20. 5	11. 4	·1413					
9. 56	21. 35	11. 33	·1418					
10. 14	22. 0	11. 44	·1413					
10. 28	21. 5	11. 53	·1414					
10. 41	21. 5	12. 2	·1411					
10. 56	21. 50	12. 32	·1413					
11. 4	21. 5	12. 59	·1407					
11. 26	22. 50	14. 3	·1409					
11. 53	20. 15	14. 24	·1419					
12. 24	21. 50	14. 37	·1415					
13. 9	21. 0	14. 43	·1416					
13. 37	22. 45	14. 55	·1411					
13. 45	21. 40	15. 6	·1411					
13. 53	21. 40	15. 17	·1413					
14. 7	23. 0	15. 41	·1408					
14. 12	25. 5	18. 4	·1426					
14. 38	21. 5	19. 13	·1410					
14. 44	20. 50	19. 26	·1412					
14. 59	23. 5	19. 51	·1407					
15. 8	22. 50	20. 8	·1410					
15. 17	23. 5	20. 41	·1401					
15. 26	22. 0	21. 8	·1384					
15. 33	21. 50	21. 37	·1378					
15. 53	24. 0	21. 56	·1385					
16. 39	21. 55	22. 1	·1382					
17. 28	23. 40	22. 34	·1399					
17. 44	23. 15		(†)					
17. 51	24. 0							
17. 58	23. 15							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 17								
h m	° ′ ″	h m		h m		h m	°	°
18. 3	20. 23. 40							
18. 12	23. 0							
18. 33	24. 0							
18. 42	23. 55							
19. 8	23. 10							
	***							
20. 8	26. 0							
	***							
21. 6	24. 5							
21. 47	29. 55							
21. 58	29. 55							
22. 14	27. 55							
22. 28	28. 0							
	(†)							
Oct. 18		Oct. 18		Oct. 18		Oct. 18		
	(†)		(†)		(†)	0. 0	59 ·6	61 ·2
0. 14	20. 30. 45	0. 50	·1395	0. 35	·02705	1. 0	59 ·6	61 ·2
0. 25	30. 45	1. 29	·1395	1. 47	·02718	2. 0	59 ·7	61 ·2
0. 39	31. 15		(†)	2. 41	·02742	3. 0	59 ·8	61 ·2
1. 16	31. 50	2. 35	·1407	6. 45	·02735	9. 0	59 ·6	61 ·6
1. 49	29. 15	2. 56	·1401	8. 54	·02740	21. 0	60 ·6	61 ·8
2. 26	29. 30	4. 6	·1413	10. 23	·02732	22. 0	60 ·4	61 ·6
2. 40	30. 0	4. 19	·1412	10. 40	·02723	23. 0	60 ·2	61 ·6
3. 14	27. 5	4. 41	·1416	11. 9	·02704			
3. 24	27. 10	4. 55	·1414	11. 14	·02714			
3. 50	24. 5	5. 26	·1417	11. 41	·02670			
4. 40	24. 30	6. 29	·1415	12. 23	·02670			
4. 56	23. 45	6. 42	·1411	13. 53	·02714			
5. 26	23. 0	6. 59	·1409	15. 4	·02710			
5. 49:	21. 0	7. 17	·1414	15. 42	·02680			
6. 10	22. 50	8. 3	·1407	16. 55	·02717			
6. 33	21. 30	8. 28	·1414	17. 39	·02719			
6. 42	19. 25	8. 44	·1410	19. 57	·02743			
6. 56	17. 50	9. 18	·1417	22. 55	·02756			
7. 6	18. 0	9. 42	·1408	23. 59	·02742			
7. 11	17. 55		***					
7. 30	19. 55	10. 9	·1409					
8. 11	19. 0	10. 26	·1417					
8. 21	19. 30	10. 41	·1417					
8. 26	19. 15	11. 3	·1397					
8. 33	20. 0	11. 17	·1426					
8. 51	19. 5	11. 29	·1431					
9. 4	21. 50	11. 41	·1420					
9. 43	17. 0	11. 55	·1417					
9. 56	17. 0	12. 6	·1421					
10. 8	17. 40	12. 22	·1417					
10. 17	19. 5	13. 41	·1409					
10. 25	18. 45	13. 57	·1415					
10. 33	19. 15	14. 24	·1412					
10. 43	18. 20	14. 36	·1415					
10. 48	22. 30	15. 6	·1402					
10. 56	24. 30	15. 20	·1409					
11. 9	19. 45	15. 40	·1415					
11. 24	21. 0	15. 46	·1413					
11. 34	25. 10	16. 10	·1417					
11. 47	22. 35		***					
12. 17	18. 10	16. 32	·1415					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 18		Oct. 18						
h m	° ′ ″	h m		h m		h m	°	°
12. 38	20. 20. 50	17. 9	·1435					
12. 43	20. 35	17. 26	·1431					
13. 4	21. 30	17. 44	·1424					
13. 17	21. 0	18. 10	·1420					
13. 38	21. 40	18. 36	·1422					
13. 44	22. 45	19. 10	·1416					
13. 56	21. 0	19. 38	·1415					
14. 11	18. 40	19. 56	·1417					
14. 22	19. 5	20. 39	·1408					
14. 29	19. 0	20. 51	·1409					
14. 38	19. 45	21. 8	·1401					
14. 41	24. 50	21. 29	·1398					
15. 6	30. 50	22. 12	·1397					
15. 12	29. 55	22. 44	·1406					
15. 24	29. 55	22. 59	·1399					
15. 51	25. 20	23. 21	·1405					
16. 6	25. 0	23. 59	·1398					
16. 13	23. 55							
16. 18	24. 10							
16. 26	23. 10							
16. 30	24. 0							
16. 41	23. 5							
16. 55:	24. 20							
17. 13	23. 20							
17. 24	23. 55							
17. 28	23. 20							
	***							
17. 55	24. 35							
18. 13	24. 20							
18. 38	23. 25							
18. 51	23. 35							
19. 17	22. 0							
19. 54	22. 30							
20. 3	23. 30							
20. 36	24. 20							
20. 52	24. 5							
20. 59	24. 45							
21. 9	23. 55							
21. 33	27. 30							
21. 56	28. 45							
22. 11	26. 40							
22. 24	25. 10							
22. 36	26. 55							
22. 41	28. 20							
22. 58	27. 10							
23. 18	29. 40							
23. 51	30. 0							
23. 57	29. 25							
23. 59	29. 10							
Oct. 19		Oct. 19		Oct. 19		Oct. 19		
0. 0	20. 29. 10	0. 0	·1398	0. 0	·02742	0. 0	59 ·6	61 ·5
0. 6	29. 0	0. 25	·1403	0. 51	·02760	1. 0	60 ·8	62 ·5
0. 21	29. 45	0. 41	·1409	4. 25	·02820	3. 0	61 ·2	62 ·5
0. 39	28. 15	0. 59	·1409	5. 19	·02816	9. 0	61 ·1	62 ·5
0. 51	29. 0	1. 17	·1404	5. 40	·02823	21. 0	60 ·8	61 ·8
0. 55	28. 0	1. 41	·1414	6. 12	·02813	22. 0	60 ·8	62 ·2
1. 36	27. 0	1. 59	·1409	7. 40	·02804	23. 0	60 ·7	61 ·8

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 19		Oct. 19		Oct. 19				
h m	° ′ ″	h m		h m		h m	°	
1.57	20.27.45	2. 9	·1412	7.59	·02812			
2.20	27.10	2.21	·1407	13.11	·02803			
2.41	25.55	2.56	·1407	13.41	·02795			
2.53	26.10	4.11	·1411	17. 0	·02787			
3.12	25. 0	4.36	·1407	21.15	·02797			
3.24	24.55	5. 3	·1411	23.59	·02778			
3.43	25.10	5.13	·1408					
5. 4	22.25	5.26	·1418					
5.11	22.30	5.45	·1423					
5.28	17.55	6.10	·1416					
5.56	22.40	6.51	·1413					
6.16	22. 0	7.20	·1420					
6.56	22.30	7.49	·1412					
7. 3	22. 5	8. 3	·1419					
7.23	22.50	8.19	·1420					
7.36	21.30	8.39	·1413					
7.47	19. 0	8.55	·1415					
7.56	18.20	9.26	·1411					
8. 0	19. 0	9.38	·1407					
8.13	18.20	10.18	·1419					
8.23	19. 0	10.43	·1414					
8.53	18.15	10.56	·1418					
9.43	21.10	11.25	·1414					
9.55	22.30	11.45	·1416					
10. 3	22.50	12.54	·1412					
10.10	21.55	13.18	·1416					
10.21	22.55	14. 6	·1413					
10.43	22.15	14.56	·1418					
10.51	21.20	15.37	·1413					
11.39⁚	24. 5	16.23	·1417					
12. 5	23.30	16.36	·1414					
12.39	23.25	16.46	·1415					
12.57	24.10	17. 2	·1412					
13.14	26.10	17.40	·1416					
13.37	24.20	18.40	·1424					
13.41	24. 0	19.51	·1411					
13.57	24.10	20.23	·1410					
14.18	23.45	20.59	·1407					
14.33	25. 0	23.14	·1403					
14.54	24. 0	23.59	·1406					
15. 4	24.10							
15.14	22.55							
15.41	23.45							
15.56	22.40							
16.10	22.50							
16.17	22. 0							
16.26	22.30							
16.39	21.55							
16.51	22.30							
17. 3	21.50							
17.23	22.40							
18.13	22.45							
18.26	23.10							
18.59	22.10							
19.43	23. 5							
20. 9	25. 0							
20.54	23.25							
21.48	25. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 19								
h m	° ′ ″	h m		h m		h m	°	°
21.56	20.24.25							
22.10	24.10							
22.26⁚	26.15							
22.40	26. 0							
22.56	27.35							
23. 2	27.20							
23. 8	28.20							
23.14	28. 0							
23.24	27.15							
23.59	28.35							
Oct. 20		Oct. 20		Oct. 20		Oct. 20		
0. 0	20.28.35	0. 0	·1406	0. 0	·02778	0. 0	61·0	62·1
0. 8	28.35	0.56	·1412	1.25	·02783	1. 0	61·4	62·6
0.19	27.50	2.41	·1405	2.43	·02817	2. 0	61·2	62·4
0.42	25.40	3.20	·1408	4.55	·02823	3. 0	61·5	62·4
1.26	26.20	4. 8	·1404	8.52	·02815	9. 0	60·9	62·6
2.10	25.45	5.44	·1411	14.39	·02800	21. 0	60·8	61·5
2.51	24.15	7. 8	·1412	18. 8	·02782			
3.41	23. 0	7.28	·1415	21.39	·02780			
3.48	23.20	8.24	·1412		(†)			
3.56	22.55	10.54	·1410					
4.20	23. 5	11.16	·1411					
4.45	22.50	11.26	·1417					
5.45	23.30	11.49	·1410					
6.50	22.30	12. 6	·1414					
7.24	23. 0	12.29	·1409					
7.38	22.45		***					
8.14	22.45	15.41	·1409					
8.30	23. 5	15.56	·1406					
11.32	23. 0	16.17	·1411					
11.43	22.20	17.36	·1414					
11.56	23. 0	18.26	·1404					
12.11	21.20	18.41	·1406					
13.10	23.30	18.53	·1402					
13.24	23. 0	19.19	·1403					
13.59	23.15	20. 7	·1411					
14.10	22.10	21.26	·1401					
14.17	23. 0	21.59	·1398					
14.31	22. 0	22. 9	·1402					
14.50	21.55	22.53	·1393					
14.55	22.25	23.33	·1400					
15. 2	22.10	23.59	·1401					
15.11	22.45							
15.28	22. 0							
15.41	22.25							
15.56	24.20							
16.38	24. 5							
16.52	24.40							
17.30	23.55							
18.13	24.30							
18.22	25.30							
18.41	24.30							
18.58	24.20							
19.14	25.10							
19.29	24.35							
19.41	25.45							
20. 6	25. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁚ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 20								
h m	° ′ ″	h m		h m		h m	°	°
20.51	20.22.30							
21.27	. 21.35							
21.33	22.25							
21.51	23.10							
21.57	22.45							
22.11	24.40							
22.18	23.20							
22.34	24.30							
23.23	25. 5							
23.28	24.40							
23.59	25.55							
Oct. 21		Oct. 21		Oct. 21		Oct. 21		
0. 0	20.25.55	0. 0	·1401	0. 0	·02782*	0. 0	61·0	61·9
0.42	26. 0	1.29	·1406		(†)	8.45	60·9	62·0
0.48	26.30	1.41	·1413	4.15	·02797	21. 0	60·6	62·1
1.28:	26.20	2.11	·1406	8.41	·02800	22. 0	60·7	62·0
1.41	27.30	3.44	·1406	13.13	·02794	23. 0	61·7	62·0
1.57	26.20	3.56	·1413	17.34	·02763			
3.38	23.35	4.13	·1406	20.12	·02764			
3.43	24. 0	4.18	·1411	21.57	·02760			
3.49	23. 0	4.29	·1405	23.59	·02742			
4.13	22.40	5.23	·1410					
4.23	23. 5	6. 3	·1401					
5. 3	22.30	6.29	·1403					
5.28	21.55	6.46	·1414					
5.40	22.10	6.51	·1410					
6. 3	22. 0	7. 7	·1419					
6.21	22.55	7.25	·1408					
6.35	22.55	7.42	·1412					
6.56	19. 0	8.11	·1405					
7.12	21.40	8.56	·1414					
7.26	20.10		***					
7.56	22. 5	12.32	·1413					
8. 6	21.30	12.56	·1410					
8.26	22.35	13.19	·1414					
8.45	22.20	14. 8	·1407					
9. 3	22.55	15.11	·1414					
9.46	22.35	16.38	·1411					
11. 7	23.45	17.14	·1419					
11.48	22.45	17.56	·1414					
11.59	23.30	19. 3	·1418					
12.39	22. 0	19.36	·1407					
12.50	22.25	19.56	·1404					
13. 3	24. 0	20.23	·1409					
13.23	21.25	21. 2	·1407					
14.26	23.40	21.44	·1400					
14.41	22.55	23.59	·1408					
14.53	22.55							
15.18	20.30							
15.53	22.30							
16. 6	22. 0							
16.56	25.30							
17. 3	25.30							
17.33	22.45							
18. 3	21.35							
18.50	22.30							
19. 3	23.20							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 21								
h m	° ′ ″	h m		h m		h m	°	
19.24	20.22.30							
19.33	23.30							
19.40	23. 5							
19.53	24. 0							
20.25	24. 0							
20.39	22.25							
20.44	22.35							
20.54	22.20							
21. 6	23. 0							
21.33	21.50							
21.39	22.20							
22. 3	22. 0							
22.28	22.10							
23.44	25.40							
23.56	25.15							
23.59	26. 0							
Oct. 22		Oct. 22		Oct. 22		Oct. 22		
0. 0	20.26. 0	0. 0	·1408	0. 0	·02742	0. 0	60·7	62·0
0. 9	27. 0	0.15	·1406	0.42	·02732	1. 0	61·2	63·0
0.30	26.20	0.32	·1405	1.55	·02784	2. 0	61·4	62·9
0.55	28. 0	1. 6	·1407	3.29	·02805	3. 0	61·4	63·0
1.22	26.30	2.13	·1405	8.41	·02794	9. 0	61·0	61·8
3.44	23.10	4. 9	·1407	14.52	·02748	11. 0	60·5	61·2
5.44	23.20	6.11	·1411	19.42	·02697	11.30	60·5	61·1
6. 5:	22.40	12. 2	·1413	22. 0	·02660	21. 0	58·8	58·9
6.54	23.20	12.24	·1419	23.32	·02612	22. 0	58·8	58·9
8.25	23. 0	12.53	·1412	23.59	·02619	23. 0	58·8	58·9
8.33	22.40	13.23	·1416					
8.49	22.40	14.44	·1410					
9. 3	23. 0	15.22	·1415					
11.44	22.30	15.49	·1414					
12. 9	26.55	16.39	·1418					
12.26	25.50	16.56	·1414					
12.33	24.40	17. 6	·1418					
12.48	23.10	17.16	·1415					
12.59	23.10	19.29	·1417					
13.32	21.55	19.56	·1410					
13.39	19.45	20. 9	·1414					
14.22	20.20	20.58	·1409					
14.36	20. 5	21.56	·1411					
15. 4	22. 0	22. 4	·1420					
15.20	21.50		(†)					
15.39	20.55	22.56	·1418					
15.59	22. 0	23. 3	·1409					
16. 8	21.35	23.24	·1418					
16.26	21.35	23.39	·1412					
16.41	22.10	23.59	·1415					
16.57	21.30							
17.18	22.50							
17.31	22.10							
18.48	23. 0							
19.39	24. 0							
19.56	22. 0							
20.33	22.15							
21. 6	20.45							
21.24	21.30							
21.39	21.10							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 22								
h m	° ′ ″	h m		h m		h m	°	°
21. 49	20. 21. 25							
21. 52	21. 5							
22. 1	22. 25							
	(†)							
22. 51	24. 0							
22. 56	23. 10							
23. 8	23. 40							
23. 26	27. 55							
23. 36	25. 35							
23. 43	25. 25							
23. 59	26. 0							
Oct. 23		Oct. 23		Oct. 23		Oct. 23		
0. 0	20. 26. 0	0. 0	·1415	0. 0	·02619	0. 0	59·0	59·2
0. 17	25. 50	0. 16	·1416	0. 31	·02622	1. 0	59·6	60·3
0. 27	26. 30	0. 22	·1414	3. 14	·02680	2. 0	59·8	60·7
0. 57	25. 20	1. 29	·1419	5. 10	·02732	3. 0	59·9	60·8
1. 21	27. 0	1. 41	·1418	5. 43	·02752	9. 0	60·0	61·4
1. 28	26. 10	1. 55	·1427	7. 11	·02764	21. 0	59·7	60·2
1. 37	26. 10	2. 8	·1417	7. 55	·02753	22. 0	59·8	60·2
1. 51	28. 50	2. 43	·1419	9. 0	·02718	23. 0	59·8	60·0
2. 3	27. 0	3. 9	·1417	9. 56	·02734			
2. 26	26. 10	3. 38	·1419	10. 12	·02723			
2. 40	27. 5	3. 46	·1426	11. 0	·02728			
2. 54	26. 15	4. 10	·1419	14. 25	·02725			
3. 23	25. 55	4. 25	·1421	14. 41	·02717			
3. 29	25. 10	5. 14	·1385	14. 56	·02722			
3. 59	26. 10	5. 17	·1387	18. 26	·02702			
4. 11	25. 45	5. 29	·1384	22. 55	.02680			
4. 24	27. 50	5. 51	·1396	23. 6	·02665			
4. 42	26. 0	6. 5	·1409	23. 12	·02680			
4. 58	28. 0	6. 35	·1398	23. 47	·02667			
5. 1	27. 50	6. 55	·1401	23. 59	·02675			
5. 11	25. 35	7. 4	·1398					
5. 26	24. 50	7. 16	·1408					
5. 32	23. 15	7. 45	·1411					
5. 38	24. 0	8. 7	·1427					
5. 43	23. 15	8. 53	·1414					
6. 10	25. 50	9. 7	·1406					
6. 14	27. 0	9. 17	·1408					
6. 26	27. 30	9. 36	·1406					
6. 43	24. 10	9. 54	·1415					
6. 56	23. 5	10. 10	·1411					
7. 11	17. 30	10. 22	·1413					
7. 16	17. 10	10. 29	·1409					
7. 32	11. 25	10. 45	·1410					
7. 40	11. 55	11. 0	·1409					
7. 51	11. 0	11. 33	·1412					
7. 59	11. 30	11. 46	·1410					
8. 39	19. 0	12. 2	·1412					
8. 53	19. 40	12. 17	·1409					
9. 8	17. 0	14. 15	·1409					
9. 16	17. 0	14. 28	·1414					
9. 34	19. 0	14. 39	·1409					
9. 44	19. 0	14. 53	·1413					
9. 58	21. 35	15. 49	·1411					
10. 17	18. 30	16. 33	·1415					
10. 26	19. 10	16. 44	·1410					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 23		Oct. 23						
h m	° ′ ″	h m		h m		h m	°	°
10. 37	20. 19. 0	16. 55	·1418					
10. 57	21. 55	17. 26	·1416					
11. 26	22. 0	17. 51	·1409					
11. 38	23. 5	17. 58	·1414					
11. 56	23. 10	18. 8	·1410					
12. 8	23. 55							
12. 13	22. 50	18. 26	·1415					
12. 21	23. 0	18. 33	·1409					
13. 10	22. 25	18. 39	·1417					
13. 38	22. 25	18. 41	·1411					
13. 58	21. 45	18. 48	·1417					
14. 6	22. 30	18. 56	·1409					
14. 23	23. 0	19. 7	·1414					
14. 33	20. 55	19. 18	·1418					
14. 52	22. 25	19. 26	·1410					
15. 22	22. 10	19. 33	·1422					
15. 33	21. 20	19. 36	·1410					
15. 53	23. 0	19. 59	·1416					
16. 3	22. 15	20. 33	·1409					
16. 10	22. 55	20. 56	·1407					
16. 24	22. 20	21. 10	·1410					
16. 33	23. 30	21. 38	·1404					
16. 38	23. 30	21. 53	·1408					
16. 51	20. 15	22. 11	·1404					
16. 57	20. 45	22. 39	·1403					
17. 14	19. 45	22. 53	·1412					
17. 23	20. 30	23. 4	·1402					
17. 26	20. 20	23. 9	·1411					
17. 43	21. 40	23. 26	·1411					
18. 4	22. 5	23. 44	·1387					
18. 21	22. 45	23. 59	·1396					
18. 26	23. 30							
18. 29	23. 10							
18. 36	23. 55							
18. 50	23. 20							
18. 56	24. 0							
19. 3	23. 25							
19. 11	25. 0							
19. 20	23. 40							
19. 26	26. 10							
19. 33	25. 35							
19. 37	25. 40							
19. 51	23. 0							
19. 56	22. 50							
20. 8	21. 30							
20. 21	21. 10							
20. 30	22. 0							
20. 38	21. 15							
20. 41	21. 35							
20. 52	21. 0							
21. 0	22. 10							
21. 20	22. 10							
21. 30	21. 50							
21. 41	23. 30							
21. 50	23. 55							
21. 59	23. 0							
22. 33	23. 30							
22. 42	27. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 23								
h m	° ′ ″	h m		h m		h m	°	°
22. 49	20. 27. 0							
22. 55	25. 15							
23. 19	30. 30							
23. 23	29. 55							
23. 29	27. 0							
23. 43	26. 0							
23. 59	26. 0							
Oct. 24		Oct. 24		Oct. 24		Oct. 24		
0. 0	20. 26. 0	0. 0	·1396	0. 0	·02675	0. 0	59·8	60·5
0. 24	24. 50	0. 10	·1406	1. 45	·02697	1. 0	60·2	60·8
0. 59	26. 50	1. 32	·1417	2. 26	·02724	2. 0	60·2	61·0
1. 26	25. 20	1. 56	·1413	3. 16	·02733	3. 0	60·2	61·5
1. 38	25. 55	2. 8	·1419	5. 56	·02738	9. 0	60·1	60·4
1. 54	25. 15	2. 21	·1414	7. 33	·02734	21. 0	59·0	59·6
2. 13	25. 30	2. 33	·1420	7. 55	·02712	22. 0	59·3	59·9
2. 23	27. 20	2. 44	·1411	9. 57	·02703	23. 0	59·3	59·9
2. 38	26. 20	3. 3	·1411	12. 42	·02695			
2. 47	26. 50	3. 9	·1419	13. 4	·02670			
2. 56	25. 50	3. 23	·1413	13. 34	·02696			
3. 4	26. 45	3. 31	·1413	14. 4	·02683			
3. 11	26. 5	3. 59	·1410	15. 24	·02694			
4. 10	25. 10	4. 13	·1418	17. 37	·02683			
4. 18	26. 0	4. 23	·1417	18. 11	·02669			
4. 24	25. 50	4. 34	·1406	23. 59	·02647			
4. 35	26. 30	4. 52	·1402					
4. 42	25. 30	5. 6	·1408					
5. 26	22. 15	5. 20	·1410					
5. 39	24. 25	5. 33	·1402					
5. 53	23. 55	6. 16	·1417					
6. 13	24. 20	6. 32	·1411					
6. 23	23. 50	6. 43	·1412					
6. 28	22. 45	6. 50	·1409					
6. 48	21. 30	6. 59	·1415					
6. 56	23. 0	7. 14	·1411					
7. 3	22. 20	7. 29	·1426					
7. 25	12. 20	7. 38	·1440					
7. 37	16. 0	7. 45	·1433					
7. 41	16. 10	7. 54	·1435					
7. 44	17. 15	8. 9	·1423					
7. 52	17. 0	8. 24	·1427					
8. 1	18. 20	9. 14	·1409					
8. 11	17. 5	10. 6	·1410					
8. 24	20. 30	10. 24	·1415					
8. 53	21. 55	11. 7	·1412					
9. 21	19. 40	11. 45	·1417					
9. 36	19. 50	12. 2	·1410					
9. 50	21. 0	12. 18	·1407					
10. 9	20. 30	12. 43	·1408					
10. 23	21. 55	12. 58	·1417					
10. 36	20. 55	13. 24	·1403					
10. 41	21. 0	13. 59	·1411					
11. 4	20. 15		***					
11. 21	22. 55	14. 42	·1412					
11. 25	23. 0	14. 59	·1404					
11. 56	19. 35	15. 16	·1409					
12. 26	24. 20	15. 40	·1413					
12. 41	24. 0		***					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 24		Oct. 24						
h m	° ′ ″	h m		h m		h m	°	°
12. 57	20. 21. 20	16. 37	·1412					
13. 9	20. 50	16. 42	·1419					
13. 44	26. 0	16. 51	·1411					
14. 23	20. 10	17. 49	·1424					
14. 33	20. 5	18. 51	·1406					
14. 41	21. 0		***					
14. 56	20. 0	19. 26	·1408					
15. 14	20. 45	19. 41	·1411					
15. 21	22. 20	19. 53	·1417					
15. 25	22. 20	20. 2	·1410					
15. 33	23. 50		***					
16. 4	21. 0	20. 38	·1412					
16. 13	22. 5	21. 3	·1407					
16. 23	22. 10	22. 29	·1406					
16. 32	20. 40		***					
16. 37	23. 35	22. 47	·1401					
16. 51	21. 25		***					
16. 58	21. 30	23. 28	·1408					
17. 3	20. 20	23. 59	·1407					
17. 31	20. 45							
17. 43	22. 50							
17. 59	22. 0							
18. 9	22. 0							
18. 21	21. 20							
18. 33	23. 30							
18. 50	23. 15							
18. 59	23. 55							
19. 21	22. 20							
19. 44	24. 0							
20. 3	22. 10							
	***							
20. 51	22. 45							
21. 25	21. 25							
21. 38	22. 15							
21. 53	21. 50							
21. 58	23. 0							
22. 9	23. 20							
22. 20	24. 30							
22. 36	24. 10							
22. 57	24. 40							
23. 7	26. 50							
23. 10	28. 50							
23. 12	27. 30							
23. 26	28. 30							
23. 36	26. 0							
23. 52	27. 10							
23. 56	26. 40							
23. 59	26. 40							
Oct. 25		Oct. 25		Oct. 25		Oct. 25		
0. 0	20. 26. 40	0. 0	·1407	0. 0	·02647	0. 0	59·5	60·4
0. 25	30. 50	0. 23	·1398	2. 44	·02712	1. 0	59·6	60·2
0. 35	30. 15	0. 40	·1397	4. 42	·02712	2. 0	59·8	60·4
0. 43	26. 20	1. 7	·1408	4. 58	·02693	3. 0	59·0	59·9
0. 55	25. 10	1. 21	·1407	5. 14	·02706	9. 0	58·9	59·7
1. 3	25. 5	1. 41	·1417	5. 52	·02696	21. 0	60·2	61·7
1. 22	26. 30	1. 53	·1411	6. 47	·02672	22. 0	60·1	60·8
1. 39	25. 30	2. 3	·1411	8. 12	·02674	23. 0	59·9	60·7

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 25		Oct. 25		Oct. 25				
1. 41	20. 25. 45	2. 25	[illegible]	[illegible]	[illegible]			
1. 45	26. 45	2. 32	·1407	9. 3	·02678			
2. 6	26. 0	[illegible]	·1404	9. 26	[illegible]			
2. 13	27. 5	2. 51	[illegible]	10. 27	·02664			
2. 25	[illegible]	[illegible]	·1403	11. 22	·02678			
2. 40	[illegible]	3. 25	[illegible]	[illegible]	[illegible]			
2. 48	23. 20			[illegible]	[illegible]			
2. 55	24. 5	[illegible]	[illegible]	12. 29	·02662			
3. 11	21. 20	4. 26	[illegible]	12. 42	[illegible]			
3. 26	21. 45	4. 40	[illegible]	13. 8	[illegible]			
3. 41	[illegible]	[illegible]	[illegible]	13. 42	·02658			
3. 44	23. 0	5. 17	·1426	[illegible]	·02702			
3. 53	23. 55	[illegible]	·1410	[illegible]	·02712			
3. 56	23. 15	5. 47	·1414	22. 14	·02700			
4. 15	24. 0	5. 56	·1407	[illegible]	·02700			
4. 43	23. 40	6. 8	·1408					
5. 6	8. 20	6. 26	[illegible]					
5. 11	8. 20	6. 39	·1419					
5. 28	17. 30	6. 50	[illegible]					
6. 3	22. 55	6. 56	[illegible]					
6. 18	18. 40	7. 10	[illegible]					
6. 29	18. 5	7. 20	·1415					
6. 53	[illegible]	7. 40	[illegible]					
[illegible]	[illegible]	[illegible]	[illegible]					
[illegible]	21. 20	8. 26	·1403					
7. 39	21. 35	8. 36	[illegible]					
[illegible]	19. 45	8. 42	[illegible]					
8. 27	19. 55	[illegible]	·1442					
8. 36	[illegible]	9. 21	[illegible]					
[illegible]	13. 30	9. 35	[illegible]					
8. 53	[illegible]	9. 54	[illegible]					
[illegible]	23. 20	[illegible]	[illegible]					
9. 26	[illegible]	[illegible]	[illegible]					
[illegible]	20. 20	11. 56	[illegible]					
9. 57	19. 50	[illegible]	[illegible]					
[illegible]	22. 30	12. 43	[illegible]					
10. 53	22. 50	13. 14	·1420					
11. 7	23. 25	14. 7	·1405					
11. 32	[illegible]	15. 8	·1406					
[illegible]	20. 20	15. 20	[illegible]					
[illegible]	25. 10	15. 55	·1409					
12. 29	23. 30	16. 5	[illegible]					
[illegible]	23. 25	16. 22	[illegible]					
[illegible]	21. 15	16. 50	[illegible]					
13. 20	28. 55	17. 26	[illegible]					
13. 32	28. 20	18. 6	[illegible]					
13. 49	26. 45	18. 21	·1402					
[illegible]	23. 50	18. 39	[illegible]					
14. 23	23. 35	[illegible]	[illegible]					
14. 28	22. 50	19. 3	[illegible]					
[illegible]	22. 40	19. 23	[illegible]					
14. 56	21. 30	19. 47	[illegible]					
[illegible]	22. 10	[illegible]	[illegible]					
15. 7	22. 0	19. 59	[illegible]					
[illegible]	23. 10	20. 3	·1402					
15. 24	[illegible]	20. 13	·1407					
[illegible]	23. 50	20. 28	[illegible]					
16. 8	22. 5							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 25		Oct. 25						
h m	° ′ ″	h m						
16. 17:	20. 22. 30	20. 56	·1402					
[illegible]	21. 0	21. 33	·1398					
16. 44	23. 10	21. 47	·1396					
17. 3	23. 50	21. 56	[illegible]					
[illegible]	23. 10							
17. 23	23. 55	22. 29	[illegible]					
17. 39	22. 15	23. 59	·1401					
17. 56	23. 20							
18. 6	23. 20							
[illegible]	[illegible]							
18. 36	[illegible]							
18. 57	24. 30							
[illegible]	27. 50							
19. 39	25. 10							
[illegible]	24. 10							
19. 55	[illegible]							
[illegible]	24. 10							
[illegible]	22. 30							
[illegible]	23. 25							
[illegible]	22. 10							
20. 42	23. 0							
20. 56	22. 15							
[illegible]	22. 30							
21. 29	22. 10							
21. 38	23. 15							
[illegible]	22. 40							
21. 56	[illegible]							
22. 29	[illegible]							
23. 33	[illegible]							
[illegible]	[illegible]							
[illegible]		Oct. 26		Oct. 26		Oct. 26		
[illegible]	[illegible]	0. 0	·1401	[illegible]	[illegible]	1. 0	60·7	61·5
[illegible]	27. 0	[illegible]	[illegible]	[illegible]	[illegible]	2. 0	60·6	61·7
	(†)	0. 29	·1407	3. 6	[illegible]	3. 0	60·6	61·7
[illegible]	[illegible]	0. 51	[illegible]	3. 51	[illegible]	6. 0	60·3	60·8
[illegible]	[illegible]	2. 6	·1409	4. 30	[illegible]	7. 25	[illegible]	[illegible]
[illegible]	26. 5	2. 28	[illegible]	8. 29	[illegible]	8. 0	[illegible]	[illegible]
[illegible]	[illegible]	3. 3:	[illegible]	13. 26	[illegible]	[illegible]	60·0	[illegible]
2. 26	24. 30	3. 55	[illegible]	[illegible]	[illegible]	10. 0	[illegible]	[illegible]
3. 32	27. 0	4. 28	·1409	[illegible]	[illegible]	21. 0	[illegible]	[illegible]
3. 41	[illegible]	7. 0	·1413		(†)	22. 0	[illegible]	[illegible]
3. 58	20. 0	7. 22	·1409	21. 0	[illegible]*	23. 0	[illegible]	[illegible]
4. 9	18. 40	7. 33	·1410					
4. 38	22. 10	7. 50	[illegible]					
5. 13	23. 55	8. 8	·1409					
5. 56	23. 5	8. 23	[illegible]					
7. 3	23. 0	10. 9	[illegible]					
7. 23	22. 0	13. 7	·1408					
7. 38	22. 10		(†)					
[illegible]	20. 30	21. 0	·1405*					
8. 10	20. 30							
8. 25	19. 30							
8. 50	20. 0							
9. 26	22. 40							
10. 6	22. 10							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 26								
h m	° ′ ″	h m		h m		h	°	°
10. 18	20. 22. 50							
10. 43	22. 15							
11. 13	22. 50							
12. 43	21. 55							
13. 30	23. 0							
14. 18	22. 50							
	(†)							
21. 0	20. 51*							
23. 52	26. 30							
23. 59	26. 30							
Oct. 27		Oct. 27		Oct. 27		Oct. 27		
0. 0	20. 26. 30		(†)		(†)	0. 0	57·8	58·1
0. 16	26. 45	1. 0	·1409*	1. 0	·02556*	1. 0	58·2	58·7
	(†)	1. 44	·1414	3. 0	·02602*	2. 0	58·5	59·4
0. 58	27. 5	2. 42	·1417	9. 0	·02641*	3. 0	58·5	59·4
2. 10	24. 45	3. 32	·1410	17. 20	·02683	5. 0	59·2	59·8
2. 49	24. 15	4. 8	·1412	22. 48	·02672	6. 0	59·4	60·1
3. 26	22. 45	4. 26	·1409		(†)	7. 0	59·4	60·1
4. 3	23. 10	5. 7	·1408			7. 45	59·7	60·5
5. 13	21. 55	5. 47	·1415			9. 0	59·5	60·8
5. 58	22. 50	6. 13	·1411			21. 15	60·5	62·1
6. 23	21. 25	7. 41	·1416					
6. 39	22. 40	9. 9	·1413					
7. 27	22. 15	9. 29	·1415					
8. 39	22. 55	9. 52	·1410					
9. 23	21. 5	10. 18	·1419					
9. 41	21. 30	10. 56	·1411					
10. 6	18. 10	13. 21	·1410					
10. 59	21. 20	13. 56	·1407					
11. 14	21. 0	15. 3	·1413					
11. 26	21. 30	16. 4	·1409					
11. 38	21. 10	18. 53	·1414					
11. 55	22. 50	19. 14	·1417					
12. 23	22. 20	19. 35	·1414					
12. 41	22. 25	19. 53	·1416					
13. 1	21. 25	20. 32	·1417					
13. 52	20. 55	20. 46	·1410					
14. 13	22. 30	21. 51	·1400					
14. 39	24. 10	22. 32	·1400					
15. 4	22. 45	23. 59	·1402					
15. 20	22. 30							
15. 56	19. 0							
16. 38	19. 20							
17. 14	21. 0							
17. 41	21. 10							
17. 56	20. 45							
18. 14	21. 30							
18. 28	21. 5							
18. 51	21. 55							
19. 14	20. 55							
20. 15	21. 25							
20. 56	20. 50							
21. 14	21. 0							
21. 23	22. 20							
21. 38	21. 40							
22. 3	22. 30							
22. 8	23. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Oct. 27								
h m	° ′ ″	h m		h m		h	°	°
22. 14	20. 22. 55							
22. 26	23. 0							
22. 36	24. 20							
23. 59	26. 10							
Oct. 28		Oct. 28		Oct. 28		Oct. 28		
0. 0	20. 26. 10	0. 0	·1402		(†)	0. 30	60·5	61·2
0. 38	26. 45	0. 56	·1413	0. 30	·02673*	5. 45	59·7	60·0
1. 58	26. 15	2. 5	·1413	0. 59	·02696	9. 0	58·9	59·5
2. 10	26. 40	2. 16	·1417	5. 29	·02663	21. 0	58·8	59·5
2. 27	26. 0	2. 32	·1414	9. 34	·02640	22. 0	58·3	59·5
2. 39	26. 0	3. 29	·1417	17. 11	·02628	23. 0	57·8	58·0
3. 55	24. 55	3. 50	·1414	20. 58	·02612			
5. 3	25. 10	4. 16	·1411	23. 59	·02[illegible]			
8. 21	23. 50	4. 32	·1416					
8. 42	23. 20	4. 43	·1420					
10. 23	23. 15	6. 11	·1420					
12. 4	22. 10	6. 29	·1424					
12. 53	22. 40	7. 0	·1422					
18. 21	22. 20	8. 2	·1422					
20. 0	21. [illegible]	12. 41	·1410					
22. 8	22. 5	18. 23	·1414					
22. 53	24. 0	19. 32	·1412					
22. 57	25. 10	20. 14	·1407					
23. 9	24. 40	22. 38	·1400					
23. 34	25. 40	23. 20	·1404					
23. 48	25. 30	23. 59	·1403					
23. 57	26. 50							
23. 59	26. 30							
Oct. 29		Oct. 29		Oct. 29		Oct. 29		
0. 0	20. 26. 30	0. 0	·1403	0. 0	·02585	1. 10	58·8	58·9
0. 7	26. 20	0. 14	·1406	0. 28	·02582	2. 0	58·8	58·9
0. 55	27. 0	0. 23	·1403		(†)	3. 0	58·9	59·0
1. 54	26. 0	2. 13	·1413	1. 10	·02587*	9. 0	58·2	58·8
3. 24	24. 0	2. 55	·1410	3. 0	·02602*	21. 0	[illegible]	59·1
4. 16	24. 0	6. 26	·1421	[illegible]. 0	·02609*	22. 0	[illegible]	[illegible]
4. 55	24. 30	7. 4	·1414	11. 57	·025[illegible]3	23. 0	58·[illegible]	58·9
5. 13	23. 55	7. 21	·1415	12. 59	·02572			
5. 5[illegible]	24. 5	7. 43	·1407	14. 19	·02583			
6. 15	23. 55	8. 21	·1413	23. 59	·02577			
7. 26	24. 0	8. 41	·1407					
7. 41	22. 5	9. 1	·1416					
7. 58	21. [illegible]	9. 33	·1409					
8. 9	24. 0	9. 50	·1420					
8. 26	26. 5	10. 11	·1413					
9. 8	[illegible]	11. 11	·1414					
9. 1[illegible]	22. 30	11. 35	·1423					
9. 28	23. 5	11. 51	·1417					
9. 41	22. 20	12. 9	·1429					
9. 56	22. 55	12. 24	·1421					
10. 44	20. 50	12. 40	·1421					
[illegible]	21. [illegible]	13. [illegible]	·141[illegible]					
11. 51	18. 15	13. 48	·14[illegible]					
12. 11	[illegible]	16. 13	·14[illegible]					
12. 26	20. 30	17. [illegible]	·14[illegible]					
12. 40	21. 45	17. 32	·1417					
[illegible]	19. 45	17. 59	·14[illegible]					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

October 27. The greater part of the V. F. photographic trace was too faint for use.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 29		Oct. 29						
h m	° ′ ″	h m		h m		h m	°	°
13. 12	20. 20. 5	18. 36	·1418					
13. 20	19. 55	18. 57	·1418					
13. 29	20. 20	19. 23	·1424					
13. 35	19. 55	19. 46	·1421					
14. 15	22. 0	20. 24	·1415					
14. 49	21. 20	20. 59	·1403					
14. 56	21. 55	21. 10	·1406					
15. 20	20. 5	21. 58	·1403					
15. 41	20. 0	22. 43	·13[illegible]					
15. 50	20. 20	22. 58	·1394					
15. 56	20. 5	23. 27	·1404					
16. 14	21. 10	23. 59	·1385					
16. 39	20. 45							
17. 6	22. 40							
17. 21	22. 5							
17. 43	25. 0							
18. 18	25. 20							
18. 53	23. 20							
19. 3	23. 0							
19. 14	23. 15							
19. 30	22. 55							
20. 11	25. 10							
20. 39	24. 25							
21. 21	26. 45							
21. 42	25. 5							
22. 20	24. 45							
22. 28	25. 10							
22. 52	24. 30							
23. 3	24. 40							
23. 14	25. 50							
23. 34	29. 40							
23. 48	30. 20							
23. 59	28. 50							
Oct. 30		Oct. 30		Oct. 30		Oct. 30		
0. 0	20. 28. 50	0. 0	·1385	0. 0	·02577	1. 0	59·4	59·[illegible]
0. 12	28. 10	0. 47	·1396	0. 56	·02597	3. 0	60·1	60·3
0. 23	28. 20	1. 2	·1394	3. 25	·02663	9. 0	59·5	[illegible]
0. 53	31. 50	1. 10	·1397	11. 41	·02628	21. 0	57·2	57·8
0. 58	31. 0		(†)	11. 55	·02643	22. 0	57·7	58·0
1. 7	31. 20	2. 19	·1398	12. 30	·02583	23. 0	57·6	58·3
	(†)	2. 58	·1397	14. 8	·02578			
1. 42	34. 10	3. 40	·1406	14. 43	·02523			
3. 6	28. 55	5. 23	·1412	15. 22	·025[illegible]			
3. 23	24. 10	7. 10⁏	·1415	15. 53	·02526			
3. 47	24. 0	8. 3	·1420	16. 22	·025[illegible]			
4. 9	25. 0	10. 26	·1409	16. 55	·02517			
4. 17	24. 45	10. 58	·1415	18. 7	·02534			
4. 41	25. 20	11. 16	·1407	18. 54	·02505			
6. 13	23. 15	11. 48	·1407	19. 56	·02526			
10. 18	22. 20	12. 8	·1432	22. 4	·02552			
10. 34	20. 40	12. 26	·1429					
10. 47	20. 55	12. 53	·1404	23. 5	·02540			
11. 3	18. 10	13. 23	·1407					
11. 28	19. 30	13. 37	·1417	23. 59	·02540			
11. 39	20. 45	14. 2	·1416					
11. 53	21. 5	14. 26	·1436					
12. 3	30. 10	15. 6	·1397					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 30		Oct. 30						
h m	° ′ ″	h m		h m		h m	°	°
12. 39	20. 18. [illegible]	15. 32	·1420					
12. 42	20. 30							
12. 48	22. 45	16. 8	·14[illegible]					
13. [illegible]	20. 45	16. 32	·142[illegible]					
13. [illegible]	20. 25							
13. 36	23. 30	17. 8	·1417					
13. 42	22. 50	17. 25	·1415					
13. 51	23. 0	17. 33	·1417					
14. 16	19. 0	17. 56	·14[illegible]					
14. 29	12. 45	18. 11	·14[illegible]					
15. 11	27. 0	18. [illegible]	·14[illegible]					
15. 29	22. 0	18. 39	·1427					
15. [illegible]	21. 1[illegible]	18. 48	·1418					
15. 50	24. 0	19. 9	·1409					
15. 58	25. 50	19. 25	·1412					
16. [illegible]	28. 25	19. 56	·1401					
16. 18	28. 30	20. 8	·1404					
16. 36	24. [illegible]	20. 56	·1362					
16. 58	22. 55	21. 5	·1376					
17. 35	30. 40	21. 33	·1380					
18. 10	43. 35	21. 56	·1395					
18. 17	41. 45	22. 17	·1396					
18. 24	41. 55	22. 24	·1[illegible]2					
18. 33	[illegible]	22. 32	·1399					
18. 39	36. 15	22. 37	·1391					
18. 50	36. 55	22. 40	·1398					
19. 7	33. 10	22. 42	·1391					
19. 18	34. 25	22. 46	·13[illegible]7					
19. 58	26. 10	22. 50	·1385					
20. 23	26. 0	22. 55	·13[illegible]7					
20. 29	24. 50	22. 57	·1383					
20. 33	24. 50	23. 4	·1393					
20. 44	27. 45	23. 6	·1384					
20. 56	26. 0	23. 16	·13[illegible]3					
21. 19	31. 55	23. 30	·1389					
21. 24	29. 0	23. 37	·13[illegible]5					
21. 28	29. 40							
21. 3[illegible]	28. 0	23. 59	·1393					
21. 55	30. 0							
22. 0	29. 5							
22. 4	29. 30							
22. 9	28. 45							
22. 20	29. 30							
22. 26	28. 40							
22. 41	28. 0							
22. 45	28. 55							
22. 51	27. 35							
23. 10	27. [illegible]							
23. 17	28. 30							
23. 28	27. 40							
23. 32	28. 15							
23. 39	28. 20							
23. 41	28. 55							
23. 52	28. 15							
23. 55	29. 0							
23. 59	28. 5							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ⁏ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.	Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Oct. 31		Oct. 31		Oct. 31		Oct. 31			Oct. 31		Oct. 31						
h m	° ′ ″	h m		h m		h m	°	°									
0. 0	20. 28. 5	0. 0	·1393	0. 0	·02540	0. 0	58·1	59·7	14. 41	20. 30. 50	19. 12	·1416					
0. 43	26. 5	0. 13	·1394	0. 42	·02537	1. 0	58·7	59·7	14. 51	30. 50	19. 38	·1408					
1. 10	27. 20	1. 2	·1402	1. 27	·02562	2. 0	58·8	59·7	14. 58	31. 55	20. 56	·1408					
1. 40	25. 25	1. 25	·1402	2. 25	·02600	3. 0	58·8	59·7	15. 8	30. 40	21. 22	·1404					
2. 8	28. 40	1. 36	·1404	3. 55	·02618	[illegible]. 0	[illegible]	[illegible]·2	15. 21	27. 0	22. 37	·1406					
2. 40	23. 0	1. 47	·1402	4. 55	·02672	11. 0	57·6	58·7	15. 36	27. 15	22. 44	·1405					
3. 10	23. 55		(†)	5. 42	·02656	21. 0	57·3	58·0	15. 49	29. 45	22. 53	·1409					
3. 23	23. 45	2. 8	·1381	7. 46	·02604	22. 0	57·4	58·0	15. 57	27. 0	23. 0	·1405					
3. 43	27. 0	2. 39	·1400	8. 47	·02540	23. 0	57·5	58·1	16. 8	27. 5	23. 37	·1407					
3. 54	24. 10	3. 6	·1402	9. 56	·02542				16. 15	26. 0	23. 59	·1410					
4. 8	22. 15	3. 20	·1389	10. 12	·02524				16. 29	26. 25							
4. 13	14. 25	3. 35	·1388	10. 29	·02527				16. 43	24. 0							
4. 24	13. 50	3. 43	·1391	10. 52	·02523				16. 51	24. 5							
4. 40	16. 0	4. 3	·1376	11. 21	·02534				16. 56	22. 30							
4. 51	11. 50	4. 17	·1386	12. 26	·02497				17. 5	23. 25							
4. 57	13. 30	4. 28	·1378	12. 44	·02478				17. 20	22. 30							
5. 4	11. 30	5. 3	·1387	13. 4	·02482				17. 36	23. 30							
5. 12	12. 5	5. 13	·1386	13. 19	·02470				17. 53	21. 30							
5. 22	11. 0		(†)	13. 41	·02477				18. 12	23. 50							
5. 28	12. 0	6. 21	·1389	14. 19	·02452				18. 35	23. 50							
5. 42	9. 0	6. 33	·1396	14. 45	·02458				19. 3	21. 20							
6. 3	18. 5	6. 59	·1395	15. 29	·02423				19. 11	23. 0							
6. 12	16. 0	7. 17	·1407	16. 36	·02457				19. 23	23. 0							
6. 23	19. 45	7. 36	·1407	18. 26	·02480				19. 30	22. 10							
6. 41	19. 10	7. 49	·1419	18. 57	·02476				20. 16	21. 55							
6. 53	21. 40	8. 10	·1407	21. 12	·02494				20. 27	22. 50							
6. 58	21. 10	8. 16	·1414	23. 59	·02497				20. 37	22. 0							
7. 8	19. 0	8. 28	·1414						20. 48	23. 0							
7. 13	17. 30	8. 58	·1421						20. 50	25. 20							
7. 30	21. 0	9. 10	·1423						20. 56	23. 50							
7. 39	20. 30	9. 23	·1426						21. 24	22. 0							
7. 52	14. 5	9. 39	·1423						21. 50	22. 55							
8. 3	20. 40	9. 56	·1430						22. 14	22. 45							
8. 23	21. 0	10. 7	·1414						22. 43	24. 5							
8. 49	17. 45	10. 26	·1400						22. 51	25. 15							
8. 59	18. 0	10. 35	·1403						22. 56	24. 15							
9. 14	27. 0	10. 53	·1392						22. 59	25. 30							
9. 25	22. 55	11. 23	·1407						23. 14	26. 0							
9. 32	23. 30	11. 43	·1400						23. 41	25. 5							
9. 56	16. 20	12. 3	·1406						23. 53	25. 50							
10. 11	20. 5	12. 11	·1403														
10. 27	15. 40	12. 29	·1405						23. 59	26. 0							
10. 39	14. 10	12. 44	·1394														
10. 53	16. 0	13. 14	·1417						Nov. 1		Nov. 1		Nov. 1		Nov. 1		
11. 3	14. 50	13. 41	·1412						0. 0	20. 26. 0	0. 0	·1410	0. 0	·02497	0. 0	58·2	58·7
11. 14	15. 10	14. 10	·1416						0. 15	26. 15	0. 44	·1413	0. 23	·02507	1. 0	[illegible]	[illegible]
11. 24	14. 45	14. 34	·142[illegible]						0. 28	27. 50	1. 5	·1403		(†)	2. 0	[illegible]	[illegible]·1
11. 41	17. 30	14. 53	·1416						0. 51	27. 50	1. 52	[illegible]	1. 0	·02536*	3. 0	[illegible]	[illegible]·6
11. 49	17. 5	15. 20	·1402						1. 0	26. 10	2. 5	·1396	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]·1
11. 56	17. 55	15. 50	·1402						1. 21	29. 30	2. 17	·1394	4. 42	·02644	21. 0	58·4	[illegible]·7
12. 9	17. 15	16. 4	·1397						1. 30	28. 50	2. 33	·1399	5. 11	·02645	22. 0	[illegible]	[illegible]·8
12. 24	18. 5	16. 35	·1413						1. 49	25. 15	2. 41	[illegible]	5. 36	·02657	23. 0	[illegible]	[illegible]·2
12. 49	21. 0	16. 58	·1413						2. 6	27. 20	3. 6	[illegible]	6. 26	·02614			
12. 57	21. 0	17. 9	·1417						2. 11	27. 20	3. 17	[illegible]	8. 11	·02592			
13. 12	19. 10	17. 28	·1417						2. 18	26. 55	3. 26	·1398	8. 27	·02576			
13. 42	24. 25	17. 48	·1410						2. 30	28. 0	3. 38	[illegible]	9. 12	[illegible]			
14. 9	19. 40	18. 41	·1424						2. 43	26. 55	3. 44	[illegible]	9. 29	[illegible]			
14. 33	25. 0	19. 2	·1415						2. 58	26. 55	3. 53	·1384	10. 4	·02555			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 1		Nov. 1		Nov. 1				
h. m.	° ′ ″	h. m.		h. m.				
3. [illegible]	20. 27. 30	4. 2	·1382	14. 21	·02552			
3. 16	24. 5	4. 15	[illegible]	14. 50	·02528			
3. 25	25. 10	4. 28	[illegible]	15. [illegible]	·02534			
3. 34	25. 5	4. 38	[illegible]	15. 45	·02483			
3. 43	26. 25	4. 41	[illegible]	17. 7	·02511			
3. 53	24. 50	[illegible]	[illegible]	18. [illegible]	·02504			
3. 56	24. 30	5. 10	[illegible]	19. 17	·02536			
[illegible]	19. 50	5. 20	·1366	21. 19	·02540			
4. 19	19. 45	[illegible]	·1412	23. 20	·02563			
4. 38	21. 40	5. 56	·1409		(†)			
[illegible]	18. 50	6. 20	[illegible]					
4. 56	22. 10	6. 33	[illegible]					
5. 8	21. 20	6. 55	[illegible]					
5. 36	0. 25	7. 21	[illegible]					
5. 55	14. 5	7. 49	·1417					
5. 58	14. 5	8. 6	[illegible]					
6. 28	25. 20	8. 25	[illegible]					
6. 44	24. [illegible]	8. 34	·1411					
6. 55	23. 50	8. 56	·1418					
7. 10	25. 0	9. 3	·1429					
7. 26	24. 15	9. 25	·1415					
7. 36	24. 55	9. 38	·1418					
8. 4	22. 50	9. 52	·1436					
8. 17	23. 10	10. 36	·1412					
8. 29	22. 50	11. 17	[illegible]					
8. 37	21. 30	11. 56	[illegible]					
8. 42	14. 55	[illegible]	·1416					
8. 48	14. 55	12. 55	·1412					
9. 3	[illegible]	13. 58	·1415					
9. 9	6. 30	[illegible]	[illegible]					
9. 31	[illegible]	14. 41	[illegible]					
9. 48	11. [illegible]	15. 36	[illegible]					
9. 54	12. 50	15. 46	·1433					
10. 9	14. 10	15. 56	·1434					
10. 20	16. 50	16. 26	[illegible]					
10. 39	18. 30	16. 56	·1413					
10. 56	21. 25	17. 9	·1422					
11. 8	21. 25	17. [illegible]	[illegible]					
11. 24:	18. 55	18. 11	·1417					
12. 3	23. 10	18. 25	·1414					
12. 49	22. 55	18. 33	·1417					
[illegible]	23. 50	18. 40	·1413					
[illegible]	23. 5	18. 48	·1415					
13. 41	23. 25	18. 53	[illegible]					
13. 50	22. 55	19. 3	·1414					
13. 58	23. 0	19. 24	·1418					
14. 14	27. 20	19. 43	·1412					
14. 26	27. 50		***					
14. 30	28. 55	20. 11	[illegible]					
14. 40	[illegible]	20. 17	·1404					
[illegible]	27. 5	20. 26	[illegible]					
[illegible]	32. 30	20. 32	[illegible]					
[illegible]	35. 40							
[illegible]	26. 50	[illegible]	[illegible]					
15. 56	[illegible]	20. 53	·1407					
15. 58	26. 0	21. 17	·1403					
[illegible]	26. 0	21. 35	·1388					
16. 18	24. 20	21. 44	[illegible]					

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Nov. 1		Nov. 1						
[illegible]	20. 23. 55	22. 4	[illegible]					
[illegible]	26. 30	22. 36	[illegible]					
17. 3	25. 20	22. 52	[illegible]					
17. 10	26. 30	23. 18	[illegible]					
17. 16	26. 0		(†)					
17. 20	26. 10							
[illegible]	23. 30							
18. 7	[illegible]							
[illegible]	22. 45							
18. 26	22. 15							
[illegible]	23. 35							
[illegible]	23. 0							
18. 50	24. 55							
[illegible]	22. 50							
[illegible]	22. 30							
[illegible]	[illegible]							
[illegible]	23. 0							
[illegible]	[illegible]							
19. 31	22. 10							
[illegible]	23. 20							
19. 40	22. 45							
19. 44	23. 30							
[illegible]	22. 55							
20. 11	23. 10							
20. 16	22. 20							
20. 29	22. 50							
20. 33	21. 50							
20. 38	[illegible]							
20. 40	22. 15							
20. 44	24. 50							
20. 51	23. 10							
20. 56	24. 30							
21. 3	24. 50							
21. 11	24. 0							
21. 21	25. 50							
21. 53	23. 40							
22. 21	27. 50							
22. 26	27. 40							
22. 32	28. 5							
22. 59	27. 10							
23. 12	29. 30							
23. 22	28. 5							
23. 29	27. 0							
	(†)							
Nov. 2		Nov. 2		Nov. 2		Nov. 2		
	(†)		(†)		(†)	0. 0	59·2	60·5
0. 56	20. 29. 40	1. 0	·1396	0. 53	[illegible]	1. 0	[illegible]	62·3
1. 6	29. 40	1. 25	·1400	1. 18	[illegible]	2. 0	[illegible]	62·2
1. 20	32. 5	1. 56	·1381	2. 13	[illegible]	3. 0	60·8	[illegible]
1. 33	32. 0	2. 9	[illegible]	2. 26	[illegible]	9. 0	[illegible]	[illegible]
1. 41	34. 10	2. 12	[illegible]	2. 45	[illegible]	21. 0	59·0	[illegible]
[illegible]	19. 40	2. 26	[illegible]	5. 13	[illegible]	22. 0	[illegible]	[illegible]
2. 11	19. 40	2. 41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2. 23	16. 5	2. 55	[illegible]	5. 41	[illegible]			
2. 33	19. 50	3. 13	·1394	5. 56	[illegible]			
2. 41	19. 0	3. 26	·1399	6. 19	[illegible]			
2. 44	[illegible]	3. 59	[illegible]	[illegible]	[illegible]			

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Nov. 2		Nov. 2		Nov. 2				
h m	° ′ ″	h m		h m				
2. 58	20. 20. 50	4. 10	·1400	10. 22	·02608			
2. 59	21. 30	4. 35	·1405	11. 40	·02617			
3. 9	22. 0	4. 44	·1402	12. 31	·02602			
3. 11	23. 30	4. 53	·1406	14. 35	·02607			
3. 13	25. 10	5. 10	·1397	15. 9	·02596			
3. 21	24. 40	5. 35	·1391	17. 41	·02589			
3. 30	25. 50	5. 43	[illegible]	23. 59	·02623			
3. 57	23. 10	5. 54	·1386					
4. 8	25. 30	6. 2	·1403					
4. 20	25. 10	6. 14	·1417					
4. 26	25. 40	6. 21	[illegible]					
4. 38	23. 55	6. 36	·1410					
4. 48	24. 0	6. 50	·1405					
4. 56	22. 55	6. 59	[illegible]					
4. 59	23. 0	7. 22	·1394					
5. 36	19. 0	7. 43	·1405					
5. 41	17. 25	8. 8	·1406					
5. 48	18. 5	8. 28	·1403					
6. 3	9. 0	8. 41	·1406					
6. 9	11. 20	8. 56	·1404					
6. 13	10. 50	9. 7	·1409					
6. 24	11. 45	9. 26	[illegible]					
6. 29	7. 20	9. 50	·1438					
6. 33	7. 5	10. 3	·1445					
6. 53	15. 0	10. 13	·1442					
6. 58	13. 10	10. 25	[illegible]					
7. 18	20. 40	10. 44	·1417					
7. 38	19. 10	11. 11	·1406					
7. 48	21. 0	11. 44	[illegible]					
7. 56	20. 45	11. 56	·1405					
8. 8	21. 25	12. 6	[illegible]					
8. 32	21. 30	12. 15	[illegible]					
8. 53	22. 55	12. 34	[illegible]					
9. 26	21. 50	12. 40	[illegible]					
9. 36	20. 40	13. 5	[illegible]					
9. 43	17. 15	13. 21	·1405					
9. 50	20. 0	13. 32	[illegible]					
9. 56	22. 10	13. 50	·1408					
10. [illegible]	[illegible]	[illegible]	[illegible]					
10. 13	[illegible]	[illegible]	[illegible]					
10. 2[illegible]	21. 10	[illegible]	·1406					
10. 33	21. 30	16. 7	·1405					
10. 44	[illegible]	16. 56	[illegible]					
11. 3	21. 40	17. 14	·1415					
11. 16	20. 30	[illegible]	[illegible]					
11. 25	[illegible]	18. 26	[illegible]					
11. 30	21. 5	18. 53	[illegible]					
11. 41	21. 25	19. 36	[illegible]					
11. 56	18. 20	[illegible]	[illegible]					
11. 59	[illegible]	19. 59	·1408					
12. 13	23. 15	20. 34	[illegible]					
12. 35	23. 5	[illegible]	·1390					
13. 28	26. 0	[illegible]	[illegible]					
13. 56	25. 50	21. 39	[illegible]					
14. 9	25. 25	[illegible]	·1405					
14. 19	24. 40	22. 53	·1407					
14. 34	24. 20							
14. 41	27. 50	23. 21	[illegible]					

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Nov. 2		Nov. 2						
h m	° ′ ″							
15. [illegible]	20. 26. 45	23. 48	·1402					
15. 28	24. 20	23. 59	[illegible]					
15. 51	27. 50							
15. 56	27. 50							
16. 7	26. 40							
16. 14	25. 50							
16. 21	26. 55							
16. 43	23. 55							
17. 8	26. 55							
17. 21	26. 0							
17. 43	27. 5							
18. 13	24. 5							
18. 21	24. 0							
18. 53	25. 20							
19. 12	24. 20							
19. 34	25. 20							
19. 50	25. 40							
19. 56	24. 35							
20. 11	25. 30							
20. 25	25. 0							
20. 41	25. 40							
21. 21	23. 10							
21. 28	24. 15							
21. 38	23. 0							
[illegible]	[illegible]							
22. 10	26. 30							
22. 21	27. 10							
22. 26	27. 0							
22. 40	27. 50							
22. [illegible]	29. 30							
[illegible]	[illegible]							
23. 2[illegible]	[illegible]							
23. [illegible]	[illegible]							
23. 39	27. 0							
23. [illegible]	[illegible]							
23. 59	27. 5							
Nov. 3		Nov. 3		Nov. 3		Nov. 3		
[illegible]	20. 27. 5	0. 0	[illegible]	[illegible]	·02623	[illegible]	[illegible]	[illegible]
[illegible]	26. 50	0. 23	[illegible]	0. 21	[illegible]	[illegible]	[illegible]	[illegible]
0. 26	29. 0	0. 29	[illegible]		(†)	2. 0	[illegible]	[illegible]
	(†)		(†)	1. 0	·02652*	3. 0	[illegible]	[illegible]
1. 0	[illegible]	1. 0	·1390*	[illegible]	·02673*	9. 0	[illegible]	[illegible]
1. 26	[illegible]	1. 56	·1386	9. 0	·02612*	[illegible]	[illegible]	[illegible]
1. 36	26. 50	2. 24	[illegible]	10. 41	·02585			
1. 48	25. 15	2. 33	[illegible]	11. 26	·02564			
1. 55	27. 20	[illegible]	[illegible]	16. 45	·02545			
2. 0	26. 0	[illegible]	·1398	[illegible]	·02476			
2. 13	28. 10	5. 3	·1398	[illegible]	·02517			
2. 29	27. 10	5. 21	·1406					
2. 41	27. 40	5. 41	[illegible]					
2. 56	26. 50	6. 12	·1386					
2. 58	27. 40	6. 59	[illegible]					
3. 12	25. 15	7. 22	[illegible]					
3. 18	[illegible]	7. 35	·1403					
3. 24	24. 5	[illegible]	[illegible]					
3. 43	25. 0	[illegible]	·1416					
3. 55	23. 55	8. 16	·1426					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 3		Nov. 3						
h m	° ′ ″	h m		h m		h m	°	°
4. 10	20. 24. 20	8. 33	·1413					
4. 26:	23. 10	8. 43	·1424					
4. 42:	24. 55	8. 57	·1413					
5. 3	22. 0	9. 18	·1412					
5. 21	23. 40	9. 34	·1404					
5. 35	20. 30	9. 56	·1404					
5. 41	19. 55	10. 18	·1426					
5. 54	20. 0	10. 26	·1421					
6. 11	17. 30	10. 35	·1428					
6. 24	18. 20	11. 14	·1419					
6. 29	18. 0	11. 29	·1409					
6. 56	20. 10	11. 48	·1417					
7. 1	20. 0	11. 54	·1413					
7. 21	22. 0	12. 8	·1418					
7. 33	22. 0	12. 23	·1411					
7. 43	19. 45	13. 18	·1414					
7. 51	19. 45	13. 56	·1404					
7. 58	16. 40	14. 17	·1411					
8. 9	16. 45	14. 36	·1406					
8. 23	20. 0	16. 11	·1413					
8. 33	16. 5	16. 21	·1410					
8. 53	21. 55	16. 50	·1421					
9. 17	20. 50	17. 10	·1418					
9. 26	19. 40	17. 28	·1409					
9. 36	19. 15	18. 6	·1403					
10. 6	16. 40	19. 5	·1418					
10. 20	18. 5	19. 53	·1418					
10. 41	27. 0	20. 53	·1410					
10. 56	23. 10	21. 26	·1411					
11. 11	24. 0	21. 53	·1402					
11. 29	21. 25	22. 53	·1399					
11. 53	19. 50	23. 59	·1406					
12. 4	20. 20							
12. 11	19. 50							
12. 20	21. 45							
12. 29	21. 30							
12. 57	22. 50							
13. 17	22. 0							
13. 28	22. 55							
13. 54	21. 55							
14. 30	24. 55							
14. 40	24. 20							
14. 51	25. 30							
15. 21	22. 0							
15. 43	23. 0							
15. 54	22. 25							
16. 14	23. 5							
16. 21	24. 20							
16. 33	23. 30							
16. 55	23. 0							
17. 40	24. 10							
17. 52	25. 50							
17. 59	25. 55							
18. 9	27. 20							
18. 28	27. 10							
18. 34	26. 30							
18. 43	27. 25							
19. 6	25. 5							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 3								
h m	° ′ ″	h m		h m		h m	°	°
20. 16	20. 25. 30							
20. 28	24. 45							
20. 59	25. 20							
21. 29	24. 45							
21. 39	24. 20							
21. 51	26. 0							
21. 58	25. 0							
22. 4	26. 30							
22. 18	27. 50							
22. 33	27. 0							
22. 39	26. 0							
22. 44	26. 20							
22. 51	25. 35							
23. 59	26. 5							
Nov. 4		Nov. 4		Nov. 4		Nov. 4		
0. 0	20. 26. 5	0. 0	·1416	0. 0	·02517	0. 30	58·5	59·0
1. 1	27. 30	1. 12	·1410	1. 7	·02546	5. 0	58·8	59·6
1. 18	29. 40	1. 40	·1405	1. 41	·02543	8. 0	58·0	57·9
1. 41:	28. 10	2. 10	·1407	3. 54	·02632	21. 0	60·6	62·1
1. 59	28. 20	2. 35	·1389	4. 57	·02584	22. 0	60·8	62·6
2. 14	30. 30	2. 50	·1380	7. 13	·02563	23. 0	60·8	62·0
2. 36	27. 35	3. 2	·1394	8. 39	·02542			
2. 48	29. 20	3. 14	·1378	10. 23	·02535			
2. 53	27. 25	3. 23	·1392	13. 55	·02580			
2. 58	27. 30	3. 32	·1392	16. 24	·02586			
3. 8:	25. 50	3. 56	·1415	17. 57	·02606			
3. 23	15. 40	4. 33	·1404	22. 4	·02642			
3. 30	15. 0	5. 18	·1411	23. 59	·02666			
3. 33	12. 15	6. 4	·1397					
3. 41	13. 30	6. 19	·1422					
4. 20:	27. 10	6. 36	·1424					
4. 33	27. 30	6. 51	·1433					
4. 42	25. 20	7. 39	·1407					
5. 28	24. 20	8. 32	·1406					
5. 54	20. 40	8. 56	·1413					
6. 12	10. 10	9. 11	·1409					
6. 23	12. 55	9. 42	·1415					
6. 32	11. 5	10. 2	·1433					
7. 11	19. 50	10. 26	·1417					
7. 33	21. 10	12. 6	·1402					
7. 36	21. 10	14. 21	·1409					
7. 51	22. 10	14. 51	·1407					
8. 11	22. 35	15. 23	·1414					
8. 26	23. 5	15. 56	·1410					
9. 23	22. 10	17. 44	·1409					
9. 34	22. 30	18. 23	·1414					
9. 56	18. 25	18. 43	·1408					
10. 8	20. 30	19. 9	·1410					
10. 23	21. 45	19. 56	·1407					
10. 48	18. 25	20. 26	·1399					
11. 57	23. 25	20. 53	1398					
12. 26	24. 40	21. 3	·1403					
12. 46	24. 35	21. 29	·1398					
13. 49	24. 55	22. 41	·1398					
14. 3	23. 55	22. 51	·1386					
14. 33	23. 30	22. 58	·1392					
14. 51	24. 20	23. 3	·1386					
			(†)					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 4								
h m	° ′ ″	h m		h m		h m	°	°
14. 56	20. 26. 30							
15. 7	27. 25							
15. 27	25. 10							
15. 36	25. 10							
16. 9	26. 0							
16. 23	24. 5							
16. 55	22. 55							
17. 39	25. 0							
17. 55	25. 0							
18. 9	24. 5							
18. 27	24. 45							
18. 49	23. 20							
18. 56	23. 15							
19. 17	24. 0							
19. 26	23. 45							
19. 38	24. 10							
19. 56	23. 55							
20. 8	25. 0							
20. 29	24. 40							
20. 34	25. 25							
20. 53	24. 20							
21. 5	26. 5							
21. 14	25. 40							
21. 21	26. 0							
21. 38	24. 30							
21. 43	25. 10							
21. 50	24. 15							
22. 0:	26. 10							
22. 23	26. 20							
22. 41	27. 30							
22. 53	27. 5							
23. 4	27. 30							
23. 29	26. 30							
23. 39	27. 10							
23. 43	27. 0							
23. 59	27. 50							
Nov. 5		Nov. 5		Nov. 5		Nov. 5		
0. 0	20. 27. 50		(†)	0. 0	·02666	1. 0	62 ·6	63 ·0
0. 23	26. 55	0. 41	·1409	0. 43	·02667	2. 0	62 ·0	62 ·9
0. 56	28. 45	1. 42	·1405	2. 33	·02716	3. 0	62 ·6	63 ·5
1. 59	27. 10	2. 9	·1391	6. 41	·02745	9. 0	61 ·9	63 ·7
2. 18	25. 30	2. 41	·1399	12. 50	·02740	21. 0	60 ·8	62 ·6
2. 26	25. 40	3. 26	·1398	17. 56	·02723	22. 0	60 ·8	62 ·0
2. 36	24. 45	5. 32	·1411	23. 40	·02706	23. 0	61 ·1	62 ·1
2. 56	25. 50	6. 11	·1408		(†)			
3. 21	25. 55	6. 27	·1412					
3. 55	23. 30	8. 4	·1412					
4. 12	23. 55	8. 29	·1420					
4. 32	25. 0	9. 4	·1407					
5. 25	24. 0	9. 27	·1408					
5. 37	24. 5	9. 54	·1421					
6. 1	22. 45	10. 36	·1406					
6. 13	21. 0	11. 33	·1410					
6. 26:	21. 0	12. 14	·1401					
6. 36	22. 55	12. 44	·1402					
6. 41	22. 55	12. 56	·1407					
6. 55	23. 10	15. 44	·1407					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 5		Nov. 5						
h m	° ′ ″	h m		h m		h m	°	°
7. 7	20. 22. 30	16. 21	·1412					
7. 25	23. 0	16. 44	·1405					
7. 36	22. 0	17. 43	·1416					
7. 43	21. 55	18. 29	·1400					
7. 58	22. 30	19. 33	·1409					
8. 19	20. 55	19. 56	·1404					
9. 9	22. 0	20. 15	·1407					
9. 37	18. 25	20. 59	·1400					
9. 47	18. 25	21. 39	·1402					
9. 54	18. 55	22. 43	·1400					
10. 32	17. 40	23. 4	·1404					
10. 45	19. 5	23. 59	·1379					
11. 3	18. 40							
11. 11	17. 30							
11. 28	17. 45							
11. 42	17. 5							
11. 56	17. 5							
12. 45	21. 20							
12. 59	23. 0							
13. 21	22. 5							
13. 39	22. 55							
13. 51	22. 15							
13. 57	22. 30							
14. 6	21. 40							
14. 27	22. 30							
15. 12	22. 5							
15. 37	24. 45							
15. 46	23. 40							
16. 14	23. 40							
16. 56	26. 40							
17. 21	25. 40							
17. 36	24. 35							
18. 0	23. 30							
18. 23	24. 50							
18. 33	24. 45							
18. 56	26. 5							
19. 6	27. 30							
19. 26	26. 20							
19. 39	26. 55							
20. 0	25. 20							
20. 50	25. 0							
21. 19	26. 30							
22. 8	25. 50							
22. 14	25. 10							
22. 38	25. 20							
22. 44	28. 30							
22. 59	29. 40							
23. 16	29. 15							
23. 33	30. 5							
23. 59	29. 55							
Nov. 6		Nov. 6		Nov. 6		Nov. 6		
0. 0	20. 29. 55	0. 0	·1379		(†)	0. 0	61 ·1	62 ·1
0. 28	31. 5	0. 32	·1385	0. 55	·02756	1. 0	61 ·3	62 ·1
0. 48	31. 15	1. 15	·1393	3. 18	·02771	2. 0	61 ·1	62 ·1
1. 15	28. 30	1. 27	·1399	3. 50	·02806	3. 0	61 ·1	62 ·1
1. 30	30. 5	1. 50	·1396	4. 11	·02797	6. 0	60 ·1	61 ·1
2. 25	27. 30	2. 13	·1393	5. 13	·02793	7. 0	60 ·1	61 ·0

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Nov. 6		Nov. 6		Nov. 6		Nov. 6			Nov. 6								
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
2.34	20.26. 0	2.43	·1400	6.58	·02744	8. 0	60·2	61·1	22.42	20.25. 0							
2.49	27.25	3. 9	·1379	7.27	·02738	9. 0	60·0	60·9	22.56	27.50							
2.57	27.15	3.19	·1385	8.10	·02712	11. 0	59·7	60·5	23. 8	26.55							
3.19	21. 5	3.49	·1397	11. 8	·02677	12. 0	59·7	60·5	23.59	29. 0							
3.37	20. 0	3.59	·1393	11.23	·02686	12.30	59·7	60·5									
3.55	25.20	4. 7	·1395	11.41	·02663	21. 0	59·9	60·8	Nov. 7		Nov. 7		Nov. 7		Nov. 7		
4.13	24.30	4.14	·1391	14.25	·02672	22. 0	60·0	61·0	0. 0	20.29. 0	0. 0	·1403	0. 0	·02665	0. 0	60·2	61·2
4.28	26. 5	4.20	·1392	21.24	·02657	23. 0	60·0	61·1	0.11	29.15	1.16	·1407	0.40	·02663	1. 0	59·9	61·1
4.39	24. 0	4.33	·1383	23.12	·02665				0.20	28.10	1.34	·1396	2. 5	·02663	2. 0	60·0	61·1
4.45	24. 0	4.40	·1387	23.59	·02665				0.41	29.30	1.44	·1399	2.25	·02687	3. 0	60·7	61·7
4.53	23. 0	4.52	·1379						0.51	28.50	2. 0	·1389	5.51	·02703	9. 0	59·6	61·0
5. 0	22.35	4.59	·1381						1.20:	29.55	2.54	·1404	9.44	·02675	21. 0	59·7	60·3
5.12	24.25	5. 6	·1389						1.36	29. 5	3.20	·1403	10.14	·02650	22. 0	59·7	60·1
5.23	24.30	5.39	·1398						1.51	30.15	3.29	·1399	14.12	·02646	23. 0	59·7	59·9
5.31	25.30	6.19	·1407						2.11	27.15	4. 3	·1412	19. 0	·02614			
6.27	22.30	6.44	·1409						2.56	26. 0	5.14	·1416	21.36	·02620			
7. 9	23.10	7.44	·1406						3.11	26.50	5.56	·1415		(†)			
7.33	22.50		(†)						3.16	28.20	6.20	·1408					
7.56	18. 0	7.56	·1399						3.22	28.10	6.35	·1415					
8.20:	22. 0	8.14	·1410						3.41	26. 0	7.23	·1416					
8.31	20. 5	8.35	·1404						3.57	26. 0	8.38	·1411					
8.43	20.15	9. 6	·1403						4.14	25.10	9.23	·1412					
8.59	22. 0	9.29	·1417						4.34	25.30	9.56	·1433					
9.26	21. 0	9.53	·1407						4.48	25. 0	10.26	·1421					
9.36	19.15	10.18	·1414						5.24	24.20	10.34	·1421					
9.53	19.15	10.51	·1406						5.38	25.10	10.50	·1415					
10.26:	20.10	10.57	·1407						5.56	25.10	11.14	·1410					
10.51	19.30	11.26	·1398						6.21	21. 5	11.37	·1414					
11. 9	20. 0	11.35	·1405						6.39:	23.50	13.56	·1414					
11.26	26.30	11.44	·1402						6.56	22.55	15.59	·1419					
11.37	26.30	12. 6	·1408						7.15	22.20	16.26	·1415					
11.51	23.55	12.56	·1402						7.37	22.55	16.56	·1421					
11.56	24. 0	13. 6	·1410						8.30	23. 0	18.59	·1426					
12.23	23.30	14. 3	·1406						8.41	22.25	20.14	·1417					
12.47	24.45	15.14	·1409						8.59	22.25	21. 3	·1405					
13.26	23. 0	15.38	·1404						9.11	21.40	21.43	·1406					
14.23	24.15	17.33	·1412						9.28	18.50		(†)					
14.51	23.10		[illegible]						9.38	13.10							
15.10	23.10	19.27	·1411						9.53	16.45							
15.43	25.30	20.33	·1401						10. 8	16.15							
15.53	25. 0	20.45	·1396						10.26	18. 0							
16.12:	25.30	21. 6	·1397						10.32	20. 5							
16.38	24.55		***						10.44	20.10							
16.56	25.10	21.50	·1396						10.58	21. 0							
17. 9	24.30	22.41	·1402						11.18	21. 0							
17.21	25. 0	23. 9	·1400						12. 4	23. 0							
17.34	24.10	23.14	·1405						12.11	24. 5							
17.38	25. 0	23.23	·1401						12.19	23.20							
17.58	24.30	23.59	·1403						13.41	23.55							
18. 7	25. 0								13.51	23.20							
18.28	23.50								14.15	24. 5							
18.36	24.10								14.28	25. 0							
18.40	23. 0								14.51	24.10							
19.21	23.30								15. 6	27. 0							
20.10	22.40								15.23	26.20							
20.40	23.40								15.51	24.20							
20.51	23.10								16.11	24.20							
20.59	24.30								16.20	25. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 7								
h m	° ′ ″	h m		h m		h m	°	°
16. 43	20. 24. 30							
17. 27	24. 55							
17. 53	23. 40							
18. 11	23. 10							
19. 23	24. 5							
19. 30	23. 45							
19. 55	25. 0							
20. 10	24. 20							
20. 41	24. 25							
21. 7	23. 40							
21. 38	23. 55							
	(†)							
Nov. 8		Nov. 8		Nov. 8		Nov. 8		
	(†)		(†)		(†)	0. 0	59 ·4	59 ·5
1. 0	20. 26. 2*	1. 0	·1409*	1. 0	·02599*	1. 0	59 ·2	59 ·6
3. 0	24. 18*	3. 0	·1410*	3. 0	·02592*	2. 0	59 ·2	59 ·1
4. 38	24. 10	4. 26	·1418	5. 57	·02665	3. 0	59 ·9	60 ·1
5. 59	23. 55	6. 24	·1419	10. 44	·02624	5. 0	61 ·5	62 ·2
6. 8	23. 0	6. 56	·1408	15. 18	·02603	9. 0	59 ·3	60 ·0
6. 20	23. 20	7. 33	·1411	21. 56	·02476	21. 0	56 ·2	56 ·9
6. 29	23. 5	7. 53	·1419	22. 55	·02468	22. 0	56 ·8	57 ·1
6. 43	23. 55	8. 13	·1409		(†)	23. 0	57 ·0	57 ·3
7. 7	18. 50	8. 28	·1409					
7. 14	18. 30	8. 36	·1406					
7. 38	22. 10	9. 9	·1409					
7. 46	19. 30	9. 33	·1402					
7. 56	16. 55	10. 7	·1410					
8. 15	18. 20	10. 37	·1406					
8. 27	18. 30	11. 46	·1412					
8. 56	21. 50	12. 10	·1409					
9. 8	21. 10	17. 56	·1416					
9. 26	21. 50	18. 24	·1414					
9. 44	21. 10	18. 41	·1417					
11. 12	23. 30	19. 3	·1413					
11. 42	23. 0	19. 58	·1415					
11. 58	23. 55	20. 15	·1412					
12. 13	23. 10	20. 45	·1413					
13. 10	23. 50	21. 51	·1409					
13. 26	23. 20	23. 59	·1413					
15. 53	24. 5							
16. 3	23. 50							
17. 2	24. 30							
17. 59	22. 55							
18. 44	23. 45							
19. 44	23. 0							
20. 6	22. 10							
	* * *							
20. 26	21. 55							
20. 59	22. 30							
21. 37	22. 10							
21. 44	22. 50							
21. 56	22. 50							
21. 59	21. 55							
22. 11	22. 20							
22. 13	23. 40							
22. 23	23. 55							
22. 25	22. 55							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 8								
h m	° ′ ″	h m		h m		h m	°	°
23. 47	20. 24. 0							
23. 49	25. 20							
23. 59	25. 20							
Nov. 9		Nov. 9		Nov. 9		Nov. 9		
0. 0	20. 25. 20	0. 0	·1413		(†)	0. 0	57 ·3	57 ·3
0. 27	25. 20	0. 30	·1417	1. 0	·02476*	1. 0	57 ·3	57 ·2
0. 59	26. 5	1. 17	·1416	2. 26	·02488	2. 0	57 ·3	57 ·0
1. 20	25. 0	1. 35	·1419	6. 19	·02497	3. 0	57 ·[illegible]	58 ·[illegible]
1. 48	25. 0	2. 9	·1414	6. 41	·02516	9. 0	56 ·8	57 ·[illegible]
3. 4	24. 15	3. 12	·1418	6. 52	·02503	21. 0	53 ·9	54 ·[illegible]
3. 26	24. 50	3. 33	·1413	7. 8	·02540	22. 0	54 ·4	55 ·0
3. 37	23. 50	4. 32	·1418	7. 43	·02519	23. 0	54 ·9	55 ·[illegible]
4. 57	23. 40	4. 50	·1424	8. 9	·02510			
5. 42	24. 20	5. 26	·1421	10. 20	·02444			
5. 53	25. 5	5. 38	·1417	10. 33	·02457			
5. 58	24. 50	5. 50	·1423	11. 12	·02443			
6. 13	25. 20	5. 58	·1413	13. 30	·02440			
6. 33	22. 50	6. 6	·1414	17. 4	·02407			
6. 39	20. 22. 50	6. 23	·1397	21. 42	·02343			
7. 0	19. 57. 0	6. 33	·1400	23. 6	·02336			
7. 11	19. 51. 45	6. 44	·1393	23. 26	·02344			
7. 36	20. 13. 30	7. 8	·1422	23. 59	·02358			
7. 43	16. 10	7. 12	·1416					
7. 55	22. 5	7. 18	·1421					
8. 8	20. 55	7. 28	·1405					
8. 15	22. 20	7. 41	·1402					
8. 39	21. 30	7. 53	·1385					
8. 56	21. 30	8. 13	·1405					
9. 13	18. 5	8. 31	·1403					
9. 26	19. 50	9. 3	·1409					
9. 30	18. 0	9. 17	·1426					
9. 49	19. 5	9. 32	·1427					
10. 3	17. 30	9. 51	·1415					
10. 11	20. 0	10. 1	·1419					
10. 28	16. 0	10. 15	·1403					
10. 41	18. 5	10. 33	·1416					
10. 56	18. 50	11. 9	·1404					
11. 21	16. 20	11. 23	·1407					
11. 26	17. 10	11. 34	·1406					
11. 44	16. 0	11. 53	·1408					
12. 7	16. 55	12. 21	·1402					
12. 14	18. 50	12. 50	·1405					
13. 6	18. 20	13. 18	·1399					
13. 44	23. 50	13. 39	·1408					
13. 56	22. 10	13. 55	·1406					
14. 3	23. 0	14. 19	·1409					
14. 17	22. 10	14. 38	·1406					
15. 41	24. 10	15. 50	·1411					
15. 59	23. 10	16. 11	·1415					
16. 11	23. 20	18. 44	·1417					
16. 27	22. 15	20. 3	·1414					
16. 41	22. 15	20. 26	·1409					
17. 4	23. 5	21. 8	·1400					
17. 42	22. 0	21. 35	·1401					
17. 52	22. 50	21. 44	·1396					
18. 32	21. 55	22. 56	·1390					
18. 40	22. 30	23. 26	·1398					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 9		Nov. 9						
h m	° ′ ″	h m		h m		h m	°	°
19. 39	20. 21. 20	23. 34	·1395					
19. 53	22. 0	23. 59	·1400					
20. 36	21. 35							
21. 26	23. 10							
21. 33	24. 30							
21. 44	24. 0							
22. 13	25. 30							
22. 53	29. 5							
22. 57	28. 50							
23. 10	31. 15							
23. 27	31. 15							
23. 53	29. 0							
23. 59	29. 25							
Nov. 10		Nov. 10		Nov. 10		Nov. 10		
0. 0	20. 29. 25	0. 0	·1400	0. 0	·02358	0. 0	55 ·3	56 ·5
0. 33	30. 10	1. 58	·1412	2. 50	·02415	1. 0	55 ·9	57 ·0
1. 21	26. 15	2. 9	·1406	6. 52	·02437	2. 0	56 ·4	57 ·5
1. 33	26. 55	2. 18	·1410	7. 20	·02463	3. 0	56 ·8	58 ·0
2. 2	26. 0	2. 27	·1405	10. 59	·02440	9. 0	57 ·1	58 ·0
2. 14	27. 5	3. 6	·1414	11. 44	·02416	21. 35	58 ·6	60 ·5
2. 43	25. 15	5. 56	·1418	13. 57	·02421			
3. 41	25. 55	6. 13	·1413	15. 11	·02403			
5. 46	23. 0	6. 33	·1410	16. 59	·02417			
6. 10	24. 5	6. 59	·1386	20. 12	·02474			
6. 29	23. 10	7. 14	·1390	22. 38	·02480			
6. 38	23. 10	7. 29	·1402	23. 12	·02493			
6. 59	17. 10	8. 24	·1415		(†)			
7. 12	18. 0	8. 55	·1412					
7. 29	21. 40	10. 56	·1413					
8. 0	22. 55	11. 21	·1418					
8. 54	21. 50	11. 37	·1427					
9. 57	21. 30	12. 18	·1411					
10. 8	20. 50	12. 52	·1417					
10. 24	21. 15	13. 43	·1414					
10. 53	21. 30	14. 13	·1405					
11. 12	26. 0	14. 35	·1411					
11. 26	24. 10	15. 2	·1423					
11. 32	24. 0	15. 26	·1423					
11. 44	22. 10	16. 9	·1412					
12. 10	22. 20	17. 4	·1424					
12. 26	23. 20	17. 56	·1415					
12. 59	21. 0	19. 6	·1422					
13. 14	21. 20	20. 26	·1415					
13. 34	22. 30	20. 42	·1407					
13. 59	25. 50	21. 9	·1407					
14. 2	28. 0	22. 0	·1400					
14. 17	29. 40	22. 23	·1392					
14. 51	25. 30	22. 28	·1383					
15. 7	22. 50	22. 51	·1394					
15. 18	22. 5	22. 55	·1390					
15. 55	22. 45	23. 15	·1404					
16. 10	23. 50	23. 39	·1406					
16. 43	23. 0		(†)					
16. 54	23. 10							
17. 14	22. 0							
17. 41	22. 30							
17. 50	23. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov. 10								
h m	° ′ ″	h m		h m		h m	°	°
18. 17	20. 22. 50							
18. 26	23. 30							
19. 10	22. 50							
19. 26	23. 40							
19. 58	23. 0							
20. 15:	24. 30							
20. 38	23. 25							
21. 7	22. 40							
21. 25	23. 25							
21. 33	24. 40							
21. 55	24. 0							
22. 8	24. 5							
22. 24	26. 0							
22. 40	25. 45							
22. 48	27. 30							
23. 3	25. 20							
23. 13	27. 35							
23. 56	25. 50							
23. 59	26. 0							
Nov. 11		Nov. 11		Nov. 11		Nov. 11		
0. 0	20. 26. 0		(†)		(†)	1. 0	58 ·6	60 ·2
0. 20	26. 55	0. 15	·1408	1. 0	·02518*	2. 0	58 ·4	60 ·0
0. 26	25. 45	1. 7	·1409	2. 35	·02528	8. 30	57 ·2	58 ·6
0. 42	25. 45	1. 53	·1403	6. 41	·02520	21. 0	56 ·6	58 ·0
1. 12	26. 50	2. 36	·1399	8. 41	·02497	22. 0	57 ·1	58 ·8
1. 39	26. 0	2. 50	·1391	9. 16	·02477	23. 0	57 ·2	58 ·9
1. 58	27. 0	3. 7	·1388	9. 56	·02494			
2. 12	28. 20	3. 13	·1394	10. 34	·02480			
2. 26	27. 30	3. 38	·1399	12. 10	·02463			
2. 40	27. 55	3. 56	·1394	12. 19	·02471			
2. 53	26. 20	4. 6	·1407	12. 57	·02452			
3. 3	27. 5	4. 21	·1409	19. 25	·02456			
3. 23	25. 5	4. 27	·1404	21. 29	·02443			
3. 29	25. 55	4. 43	·1423	23. 59	·02463			
3. 41	23. 20	5. 4	·1404					
3. 47	19. 0	5. 13	·1410					
3. 56	16. 40	5. 34	·1399					
4. 9	15. 5	5. 48	·1404					
4. 13	15. 35	5. 54	·1404					
4. 26	12. 10	6. 3	·1408					
4. 39	19. 30	6. 9	·1404					
4. 48	21. 0	6. 16	·1409					
4. 56	18. 25	6. 25	·1404					
5. 18	21. 20	6. 36	·1407					
5. 26	20. 20	6. 56	·1432					
5. 41	23. 30	7. 23	·1402					
5. 45	23. 25	7. 38	·1403					
5. 56	25. 5	7. 50	·1412					
6. 9	23. 0	8. 3	·1408					
6. 26	16. 40	8. 13	·1409					
6. 33	15. 10	8. 25	·1406					
6. 41	10. 55	8. 43	·1414					
6. 57	21. 0	9. 26	·1397					
7. 11	22. 50	9. 53	·1409					
7. 27	19. 30	10. 3	·1403					
7. 38	19. 10	10. 23	·1412					
7. 44	20. 20	10. 40	·1407					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Nov. 11		Nov. 11							Nov. 12		Nov. 12		Nov. 12		Nov. 12		
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
8. 10	20. 14. 55	11. 26	·1407						0. 0	20. 26. 25	0. 0	·1403	0. 0	·02463	0. 0	56·8	59·3
8. 20	15. 0	12. 12	·1413						0. 26	25. 10	0. 21	·1405	0. 4	·02463	1. 0	56·9	59·4
8. 27	13. 50	12. 26	·1412						0. 49	25. 15		(†)		(†)	2. 0	57·4	59·8
8. 47	17. 35	12. 40	·1418						1. 3	28. 5	1. 0	·1405*	1. 0	·02489*	3. 0	57·9	59·8
8. 54	17. 55	13. 43	·1412						1. 42	25. 40	3. 0	·1395*	3. 0	·02521*	5. 0	58·5	59·8
9. 9	19. 20	14. 23	·1412						1. 54	26. 30	4. 0	·1412	8. 54	·02545	9. 0	59·6	61·0
9. 39	12. 30	14. 42	·1409						1. 59	26. 5	5. 10	·1412	10. 26	·02566	11. 0	60·5	62·0
9. 54	17. 0	14. 56	·1411							* * *	7. 4	·1418	13. 0	·02585	12. 0	60·1	61·5
9. 59	17. 50	15. 23	·1412						2. 54	27. 10	7. 56	·1414	20. 29	·02580	13. 0	59·6	61·3
10. 9	17. 35	15. 38	·1416						2. 59	26. 5	8. 39	·1422	21. 41	·02576	14. 0	59·8	61·6
10. 21	19. 0	17. 6	·1411						3. 8	26. 5	8. 55	·1416	23. 59	·02576	15. 0	59·8	61·1
10. 39	17. 40	17. 26	·1416						3. 20	22. 50	9. 8	·1423			21. 0	59·8	60·9
11. 23	24. 0	18. 11	·1410						3. 26	23. 10	9. 43	·1416			22. 0	59·6	61·0
11. 28	23. 20	18. 48	·1417						3. 37	22. 45	11. 13	·1413			23. 0	59·7	60·9
11. 37	23. 55	19. 11	·1410						3. 56:	25. 0	11. 28	·1421					
11. 56	23. 5	19. 27	·1415						4. 11	24. 40	11. 53	·1421					
12. 4	23. 50	20. 3	·1416						5. 6	25. 5	12. 20	·1416					
12. 13	27. 20	21. 23	·1408						6. 39	22. 45	12. 40	·1422					
12. 43	28. 45	21. 43	·1399						6. 56	22. 45	13. 32	·1417					
13. 13	22. 45	22. 9	·1396						7. 23	23. 20	16. 53	·1419					
13. 36	22. 45	22. 26	·1401						7. 41	22. 30	17. 10	·1416					
13. 59	23. 55	22. 34	·1396						7. 57	20. 0	18. 41	·1419					
14. 13	23. 20	22. 56	·1396						8. 12	21. 40	18. 49	·1423					
14. 17	23. 20	23. 2	·1401						8. 26	21. 0	18. 55	·1419					
14. 26	24. 20	23. 9	·1396						8. 37	21. 5	19. 2	·1423					
14. 30	24. 0	23. 13	·1403						8. 53	19. 25	19. 8	·1419					
14. 39	24. 15	23. 18	·1397						9. 39	21. 10	19. 14	·1423					
14. 44	25. 30	23. 55	·1405						10. 33	21. 10	19. 29	·1425					
14. 53	24. 55	23. 59	·1403						11. 8	21. 30	19. 37	·1420					
14. 59	24. 55								11. 21	24. 0	19. 51	·1423					
15. 20	23. 25								11. 57:	20. 40	21. 6	·1414					
15. 26	23. 45								12. 21	22. 35		* * *					
15. 52	23. 15								12. 39	23. 20	23. 11	·1409					
16. 55	24. 50								13. 2	22. 15	23. 23	·1402					
17. 6	23. 15								13. 9	22. 45	23. 59	·1406					
17. 59	24. 55								13. 53	22. 30							
18. 10	23. 40								14. 6	23. 5							
18. 17	24. 0								14. 58	22. 50							
18. 28	23. 25								15. 36	23. 20							
19. 3	23. 55								15. 46	23. 10							
19. 21	22. 45								16. 16	23. 55							
19. 36	23. 20								16. 41:	23. 45							
19. 55	22. 30								17. 6	24. 45							
20. 47	22. 50								18. 50	23. 30							
21. 50	25. 0								18. 56	24. 20							
21. 57	25. 30								19. 2	23. 15							
22. 11	25. 10								19. 11	23. 50							
22. 24	25. 45									* * *							
22. 54	25. 30								19. 44	22. 40							
23. 3	26. 20								19. 55	23. 20							
23. 11	25. 50								20. 59	22. 55							
23. 13	26. 50								21. 11	21. 50							
23. 15	25. 55								21. 21	22. 45							
23. 33	25. 0								21. 29	22. 10							
23. 39	25. 50								22. 19	23. 15							
23. 50	25. 50								22. 29	24. 30							
23. 56	26. 55								22. 36	23. 55							
23. 59	26. 25								22. 55	24. 45							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.12								
h m	° ′ ″	h m		h m		h m	°	°
23. 4	20. 24. 25							
23. 13	25. 30							
23. 21	25. 30							
23. 26	27. 10							
23. 38	26. 25							
23. 42	26. 40							
23. 56	25. 30							
23. 59	25. 40							
Nov.13		Nov.13		Nov.13		Nov.13		
0. 0	20. 25. 40	0. 0	·1406	0. 0	·02576	0. 0	60·1	61·0
0. 20	25. 5	0. 25	·1410	0. 21	·02603	1. 0	60·6	61·1
0. 24	26. 20	1. 4	·1406	4. 23	·02632	2. 0	60·1	61·1
0. 41	26. 30	1. 28	·1410	5. 1	·02622	3. 0	60·0	60·9
0. 48	27. 0	2. 33	·1409	5. 22	·02614	6. 0	58·6	60·0
1. 8	26. 10	3. 22	·1399	6. 21	·02603	7. 0	58·5	59·8
1. 26	27. 0	3. 44	·1407	8. 50	·02572	8. 0	58·5	59·8
1. 41	26. 50	3. 55	·1402	10. 15	·02543	9. 0	58·4	58·7
2. 41	27. 40	4. 7	·1402	13. 6	·02540	10. 0	58·1	58·6
3. 3	26. 50	4. 14	·1406	13. 36	·02525	11. 0	58·4	59·0
3. 21	26. 50	4. 18	·1402	17. 22	·02517	15. 0	57·8	59·0
3. 29	25. 30	4. 34	·1406	21. 13	·02520	17. 0	57·6	59·0
3. 53	24. 0	4. 40	·1398	22. 42	·02492	18. 0	57·8	58·3
3. 59	24. 55	4. 57	·1410	23. 59	·02497	21. 0	58·3	58·1
4. 10	24. 35	5. 9	·1397			22. 0	58·3	58·5
4. 20	25. 10	5. 28	·1395			23. 0	57·8	58·0
4. 27	25. 10	5. 46	·1400					
4. 36	26. 30	5. 59	·1392					
4. 43	25. 0	6. 13	·1404					
4. 57	30. 0	6. 26	·1394					
5. 12	27. 20	7. 8	·1409					
5. 25	24. 45	7. 26	·1407					
5. 39	23. 45	8. 13	·1412					
5. 54	25. 0	9. 4	·1409					
6. 5	22. 50	9. 18	·1409					
6. 9	22. 50	9. 39	·1403					
6. 20	27. 50	10. 4	·1417					
6. 41	23. 50	10. 26	·1412					
7. 2	23. 0	10. 38	·1418					
7. 14	24. 10	10. 57	·1414					
7. 29	22. 40	11. 10	·1406					
7. 43	22. 10	11. 29	·1403					
8. 24	22. 10	11. 44	·1406					
8. 40	22. 30	12. 8	·1403					
9. 8	21. 10	12. 56	·1403					
9. 16	21. 15	13. 25	·1426					
9. 41	17. 15	13. 46	·1413					
9. 53	18. 10	14. 10	·1411					
10. 11	18. 0	14. 24	·1406					
10. 27	12. 30	14. 56	·1409					
10. 42	13. 25	16. 26	·1410					
10. 59:	12. 20	16. 36	·1414					
11. 19	16. 0	16. 49	·1412					
12. 3	19. 15	17. 4	·1416					
12. 9	19. 5	17. 9	·1412					
12. 51	21. 10	17. 22	·1419					
12. 57	20. 20	17. 29	·1415					
13. 11	21. 0	17. 43	·1419					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.13		Nov.13						
h m	° ′ ″	h m		h m		h m	°	°
13. 28	20. 20. 20	17. 53	·1416					
14. 8	23. 5	18. 21	·1413					
14. 19	22. 50	18. 41	·1417					
14. 39	24. 5	19. 9	·1410					
14. 49	23. 55	19. 26	·1415					
14. 58	24. 30	19. 53	·1410					
15. 28	23. 50	20. 11	·1410					
15. 42	24. 20	20. 29	·1403					
16. 17	24. 0	20. 51	·1404					
16. 24	23. 25	21. 28	·1412					
16. 47	23. 35	22. 8	·1407					
17. 3	25. 10	22. 29	·1409					
17. 6	24. 0	22. 56	·1405					
17. 17	22. 45	23. 32	·1403					
17. 25	23. 25	23. 59	·1401					
17. 36	23. 5							
17. 42	24. 15							
17. 51	23. 40							
18. 19	25. 5							
18. 24	24. 0							
18. 53	24. 20							
19. 10	26. 5							
19. 21	25. 50							
19. 33	26. 45							
19. 56	25. 40							
20. 29	26. 25							
20. 38	27. 30							
20. 57	28. 0							
21. 54	26. 20							
22. 15	26. 30							
22. 29	27. 45							
22. 56	27. 20							
23. 11	27. 35							
23. 29	26. 20							
23. 59	25. 30							
Nov.14		Nov.14		Nov.14		Nov.14		
0. 0	20. 25. 30	0. 0	·1401	0. 0	·02497	0. 0	58·0	58·2
0. 28:	26. 25	1. 21	·1411	0. 52	·02510	1. 0	58·3	59·0
0. 44	25. 55	1. 43	·1401	1. 53	·02518	2. 0	58·3	60·0
1. 17	28. 30	2. 17	·1402	3. 14	·02543	3. 0	58·2	59·1
1. 28	27. 15	2. 29	·1406	7. 12	·02524	9. 0	57·3	58·1
1. 41	27. 55	2. 38	·1402	8. 55	·02505	21. 0	55·4	56·0
1. 56	27. 55	3. 14	·1413	12. 23	·02451	22. 30	55·8	56·6
2. 11	26. 0	3. 58	·1411	12. 40	·02463	23. 0	55·9	56·9
2. 14	26. 10	5. 28	·1416	13. 19	·02425			
2. 43	24. 20	5. 59	·1412	14. 41	·02437			
3. 8	23. 40	6. 26	·1414	21. 25	·02363			
3. 26	22. 10	6. 38	·1411	23. 59	·02380			
3. 54	24. 5	6. 53	·1412					
4. 5	23. 40	7. 24	·1401					
5. 14	24. 15	7. 40	·1402					
5. 26	23. 45	7. 55	·1412					
5. 44	24. 15	8. 9	·1414					
6. 23	23. 55	8. 28	·1405					
6. 37	24. 30	8. 45	·1406					
6. 50	24. 5	9. 10	·1421					
7. 10	20. 40	9. 32	·1406					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Nov. 14		Nov. 14							Nov. 14								
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
7. 23	20. 21. 0	9. 49	·1407						23. 28	20. 25. 50							
7. 34	21. 0	10. 13	·1421						23. 55	25. 20							
7. 43	19. 40	10. 33	·1417						23. 59	25. 30							
7. 56	19. 15	10. 48	·1419														
8. 17	21. 40	11. 16	·1412						Nov. 15		Nov. 15		Nov. 15		Nov. 15		
8. 23	21. 50	12. 41	·1413						0. 0	20. 25. 30	0. 0	·1410	0. 0	·02380	0. 0	56·2	57·3
8. 56	15. 30	13. 9	·1425						0. 38	27. 0	0. 36	·1416	0. 43	·02411	1. 0	56·8	57·7
9. 8	16. 5	13. 54	·1408						1. 4	27. 15	1. 11	·1409	1. 56	·02460	2. 0	56·9	58·0
9. 15	17. 30	14. 0	·1412						1. 11	28. 30	1. 26	·1396	2. 30	·02444	3. 0	57·2	58·6
9. 44	19. 20	14. 6	·1410						1. 21	27. 0	1. 29	·1397	6. 8	·02453	9. 0	57·4	58·7
9. 57	17. 0	14. 24	·1412						1. 29	27. 25	1. 41	·1390	9. 14	·02443	21. 0	58·6	60·2
10. 3	16. 0	14. 41	·1407						1. 41	26. 30	1. 59	·1405	10. 12	·02437	22. 0	59·3	61·0
10. 28	18. 30	15. 23	·1412						1. 51	26. 30	2. 9	·1400	10. 41	·02440	23. 0	59·3	61·0
11. 12	20. 45	15. 32	·1408						2. 7	28. 35	2. 47	·1414	11. 12	·02433			
11. 44	18. 55	16. 28	·1421						2. 24	26. 55	4. 23	·1418	16. 55	·02460			
12. 28	20. 20	16. 56	·1417						2. 30	26. 55	4. 27	·1415	18. 26	·02460			
12. 51	29. 25	17. 8	·1419						2. 44	25. 50	5. 37	·1419	19. 59	·02476			
12. 56	29. 25	17. 14	·1414						2. 57	25. 50	5. 54	·1416	22. 57	·02500			
13. 23	21. 0	18. 17	·1417						3. 13:	25. 0	8. 13	·1419	23. 59	·02520			
13. 32	21. 40	18. 28	·1416						3. 43	26. 5	8. 25	·1425					
13. 46	20. 25	18. 44	·1420						3. 51	25. 20	8. 41	·1420					
13. 53	21. 10	19. 6	·1416						3. 58	25. 30	9. 8	·1421					
14. 13	19. 30		***						4. 12	24. 0	9. 25	·1434					
14. 28	21. 0	19. 39	·1411						4. 25	24. 5	9. 38	·1429					
14. 41	23. 40	19. 52	·1417						4. 32	23. 20	9. 54	·1428					
14. 56	23. 45	20. 14	·1418						4. 53	24. 45	10. 26	·1417					
15. 11	23. 10	20. 21	·1413						4. 57	24. 35	11. 8	·1425					
15. 17	23. 30	20. 33	·1414						5. 14	25. 10	11. 17	·1422					
15. 34	23. 0	20. 53	·1418						5. 26	24. 45	11. 27	·1428					
15. 56	23. 30	21. 12	·1412						5. 38	25. 0	11. 59	·1418					
16. 11	21. 50	21. 44	·1407						5. 46	24. 50	12. 33	·1420					
16. 33	22. 0	22. 14	·1407						5. 57	23. 30	12. 53	·1415					
16. 41	22. 55	22. 28	·1403						6. 13	22. 50	13. 53	·1418					
17. 9	24. 0	22. 56	·1403						6. 39	23. 30	14. 23	·1416					
17. 12	23. 30	23. 8	·1408						6. 55	22. 55	15. 14	·1421					
17. 40	23. 20	23. 59	·1410						7. 29	23. 5	16. 9	·1421					
17. 43	24. 30								7. 54	22. 0	16. 29	·1418					
18. 11	23. 30								8. 8	20. 25	16. 37	·1423					
18. 14	24. 30								8. 21	17. 20	16. 44	·1420					
18. 29	24. 0								8. 41	22. 0	17. 28	·1428					
19. 3	27. 0								9. 0	22. 0	18. 21	·1419					
19. 17	27. 25								9. 13	16. 55	19. 13	·1418					
19. 36	26. 30								10. 3	19. 20	19. 28	·1420					
19. 41	27. 5								10. 21:	18. 25	19. 41	·1416					
20. 8	26. 50								10. 51	20. 50	19. 53	·1422					
20. 12	26. 10								11. 3	19. 45	19. 57	·1416					
20. 23	26. 10								11. 21	15. 10	20. 11	·1423					
20. 34	27. 0								11. 56	18. 5		**					
20. 56	25. 30								12. 7	19. 20	20. 49	·1415					
21. 24	25. 45								12. 39	19. 30	21. 28	·1417					
21. 38	24. 30								13. 29	23. 10	21. 48	·1412					
21. 43	25. 0								13. 41	22. 40	22. 56	·1403					
21. 52	25. 0								13. 56	22. 40	22. 29	·1410					
21. 58	26. 40								14. 3	23. 20	23. 50	·1407					
22. 18	26. 0								14. 22	23. 30	23. 59	·1411					
22. 26	25. 10								14. 42	23. 20							
22. 41	24. 50								15. 9	24. 20							
22. 46	23. 30								15. 14	23. 0							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.15								
h m	° ′ ″	h m		h m		h m	°	°
15.37	20.22.30							
15.51	22.30							
15.57	23.10							
16.10	22.30							
16.26	24. 0							
16.33	25.15							
16.39	24.55							
17. 6	26. 0							
17.39	25.25							
17.54	25.30							
17.59	25.55							
18. 9	25.20							
18.21	26. 5							
18.36	25.25							
18.42	24.30							
19.26	21.45							
19.38	22.50							
19.46	22.25							
19.51	21.15							
19.58	23.40							
20. 9	22. 5							
20.17	23.45							
20.24	23. 5							
20.27	23.35							
20.32	22.40							
20.41	22.20							
20.47	22.35							
20.54	21.50							
21.24	23.55							
21.41	23.45							
22.23	26.50							
22.29	26.40							
22.39	27.40							
22.53	27. 5							
22.59	27. 0							
23.14	29.10							
23.25	28.20							
23.39	29. 5							
23.52	30.40							
23.59	30.10							
Nov.16		Nov.16		Nov.16		Nov.16		
0. 0	20.30.10	0. 0	·1411	0. 0	·02520	0. 0	59·2	59·8
0.39	28.25	0. 9	·1412	1.53	·02544	1. 0	59·5	60·0
2.16	25.50	0.30	·1409	4.30	·02560	2. 0	59·5	60·0
2.24	25. 5		(†)	5.14	·02548	3. 0	59·6	60·0
2.33	25.20	1. 0	·1413*	5.44	·02568	9. 0	57·8	58·0
2.59	24.50	3. 0	·1420*	6.43	·02547	21. 0	53·9	53·8
3. 9	24.10	3.38	·1419		(†)	22. 0	54·1	54·3
3.53	24. 0	4.24	·1411	9. 0	·02497*	23. 0	54·4	54·7
4.13	19.45	5. 6	·1420	12.10	·02465			
4.21	19.45	5.39	·1396	16.19	·02440			
4.59	24.50	6.13	·1412	19. 4	·02388			
5. 8	24. 5	7. 3	·1413	23. 2	·02311			
5.45	12.20	7.29	·1410	23.59	·02314			
5.52	12.35	7.53	·1413					
6.44	22.10	8.29	·1411					
7.43	22.50	9.43	·1418					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.16		Nov.16						
h m	° ′ ″	h m		h m		h m	°	°
8. 8	20.20.50	10. 6	·1429					
8.41	21.10	10.31	·1432					
9.11	20.20	10.49	·1421					
9.38	20.55	11.14	·1431					
9.55	22.10	11.57	·1417					
10.21	17.20	16.16	·1420					
10.29	18.20	17.28	·1425					
10.43	17. 0	17.47	·1424					
10.56	17. 0	18.28	·1430					
11.21	20.55	19.53	·1425					
11.27	21. 0	21.32	·1426					
11.41	22. 5		***					
12.11	21.55	22.34	·1423					
12.26	22.45	23.13	·1413					
12.38	22.40	23.59	·1415					
12.51	23.15							
13. 9	21.40							
13.36	22.50							
14. 9	23.20							
16.12	23.50							
16.21	22.55							
16.28	23.45							
16.38	23.15							
18.55	22.50							
19. 3	23.10							
19.40	22.20							
19.51	22.45							
19.59	22. 5							
20.30	22. 0							
21. 6	22.10							
21.58	23.20							
22. 7	22.50							
22.12	24.10							
22.41:	25.40							
22.55	25. 5							
23.18	26.30							
23.59	26.25							
Nov.17		Nov.17		Nov.17		Nov.17		
0. 0	20.26.25	0. 0	·1415	0. 0	·02314	0. 0	55·4	55·1
0.34	26.10	1.19	·1419	3.12	·02343	1. 0	55·7	56·8
1. 1	27.25	2.51	·1420	8. 0	·02332	2. 0	55·6	56·0
1.26	26.50	6.41	·1426	12.28	·02294	3. 0	55·7	56·1
1.38	26.55	10.40	·1422	18.54	·02278	9. 0	54·8	56·0
2. 3	25.25	11.17	·1429	22.40	·02283	21.30	54·9	55·7
2.13	25.55	11.46	·1424		(†)			
2.41	25. 0	16.14	·1429					
2.59	24.50	16.36	·1425					
3.17	23.40	17. 9	·1430					
3.44	24. 0	17.25	·1427					
4.28	23. 5	17.51	·1433					
9.29	21.50	19.12	·1427					
9.51	20. 5	19.56	·1431					
10.23	21. 0	21.39	·1426					
10.41	21. 0		(†)					
11. 3:	18.40							
11.31	20.20							
11.38	20.20							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Nov.17								
h m	° ′ ″	h m		h m		h m	°	°
12. 41	20. 22. 20							
12. 52	21. 50							
13. 8	22. 15							
13. 18	22. 5							
13. 56	22. 50							
14. 38	22. 0							
15. 51	22. 40							
16. 6	22. 10							
16. 26	23. 45							
16. 57	23. 0							
17. 23	23. 40							
17. 51	21. 55							
17. 56	22. 0							
18. 12	21. 30							
18. 26	22. 45							
18. 30	22. 15							
19. 20	23. 0							
19. 55	22. 30							
20. 36	23. 10							
20. 51	22. 50							
21. 26	23. 20							
21. 48	24. 0							
22. 15	25. 30							
22. 26	25. 5							
22. 43	25. 25							
	(†)							
Nov.18		Nov.18		Nov.18		Nov.18		
	(†)		(†)	0. 0	·02280*	0. 0	55·0	55·9
0. 59	20. 25. 50	0. 0	·1429*	9. 0	·02293*	9. 0	55·0	55·4
1. 40	25. 30	0. 10	·1430	21. 0	·02201*	21. 0	52·9	53·0
2. 21	24. 40	0. 59	·1431			22. 0	52·8	52·8
2. 43	25. 0	2. 48	·1429			23. 0	52·5	52·1
3. 11	24. 5	3. 6	·1422					
3. 26	24. 30	4. 26	·1430					
4. 33	23. 25	5. 29	·1434					
5. 15	23. 20	8. 11	·1432					
5. 26	22. 50	8. 33	·1433					
6. 29	22. 30	9. 56	·1429					
7. 25	22. 55	10. 13	·1431					
7. 43	22. 0	10. 39	·1424					
8. 14	22. 20	11. 6	·1429					
9. 44	20. 40	11. 33	·1422					
10. 10	19. 20	11. 56	·1426					
10. 26	19. 45	17. 21	·1431					
10. 36	19. 45	19. 23	·1433					
10. 56	20. 10	19. 46	·1437					
11. 11	20. 0	20. 2	·1432					
11. 23	21. 20	20. 12	·1435					
11. 39	20. 35	20. 33	·1430					
13. 3	22. 45	21. 25	·1425					
13. 56	22. 45	21. 44	·1427					
14. 9	22. 20	22. 45	·1431					
15. 11	22. 25	23. 59	·1430					
15. 41	21. 55							
16. 42	22. 5							
17. 36	21. 20							
18. 6	22. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Nov.18								
h m	° ′ ″	h m		h m		h m	°	°
18. 26	20. 21. 50							
18. 56	22. 30							
19. 6	22. 30							
	(†)							
21. 0	21. 28*							
23. 2	25. 35							
23. 14	25. 35							
23. 23	26. 5							
23. 37	24. 30							
23. 41	24. 30							
23. 51	25. 15							
23. 59	24. 55							
Nov.19		Nov.19		Nov.19		Nov.19		
0. 0	20. 24. 55	0. 0	·1430		(†)	0. 0	53·3	54·0
0. 26	24. 40	0. 37	·1430	1. 0	·02196*	1. 0	54·0	54·4
0. 30	24. 0	1. 34	·1434	3. 0	·02214*	3. 0	54·5	55·0
0. 51	24. 10	1. 53	·1431	9. 0	·02274*	9. 0	53·5	54·0
0. 57	25. 45	2. 23	·1436	11. 30	·02212	21. 0	51·3	52·3
1. 7	25. 25	2. 44	·1428	12. 29	·02184	22. 0	51·3	52·3
1. 23	26. 40	3. 43	·1429	12. 42	·02195	23. 0	50·7	51·3
1. 31	25. 40	3. 56	·1435	13. 0	·02180			
1. 40	25. 55	4. 13	·1429	15. 42	·02176			
1. 51	25. 0	4. 28	·1435	21. 0	·02137			
2. 3	24. 50	4. 43	·1435	22. 26	·02118			
2. 8	26. 0	4. 59	·1445	23. 59	·02090			
2. 13	25. 20	5. 11	·1432					
2. 26	27. 50	5. 32	·1431					
2. 43	26. 40	5. 45	·1443					
3. 4	24. 10	6. 9	·1421					
3. 13	24. 35	6. 18	·1426					
3. 24	24. 5	6. 26	·1421					
3. 43	25. 10	6. 33	·1426					
3. 50	24. 55	6. 50	·1421					
4. 11	26. 20	7. 14	·1428					
4. 53	24. 30	7. 32	·1424					
5. 7	26. 50	7. 53	·1424					
5. 21	25. 55	8. 3	·1407					
5. 36	25. 25	8. 32	·1382					
5. 53	28. 0	9. 17	·1408					
6. 11	25. 20	9. 36	·1404					
6. 20	26. 15	9. 48	·1413					
6. 39	25. 5	9. 58	·1427					
6. 47	23. 50	10. 13	·1415					
7. 3	23. 40	10. 44	·1419					
7. 21	24. 15	11. 2	·1415					
7. 38	23. 10	11. 9	·1421					
7. 51	23. 20	11. 38	·1415					
7. 57	22. 20	11. 59	·1415					
8. 6	9. 10	12. 29	·1423					
8. 11	9. 30	12. 48	·1417					
8. 14	8. 15	12. 56	·1421					
8. 20	8. 40	13. 13	·1411					
8. 29	12. 40	13. 33	·1418					
8. 38	10. 30	13. 59	·1415					
8. 51	14. 0	14. 12	·1422					
9. 3	13. 5	14. 41	·1415					
9. 8	13. 40	14. 56	·1421					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

November 18, 21, 22, and 23. The photographic traces for Vertical Force on these days were too faint for use.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Nov. 19		Nov. 19						
h m	° ′ ″	h m		h m		h m	°	°
9. 28	20. 18. 5	15. 25	·1425					
9. 32	18. 10	15. 43	·1420					
9. 39	19. 20	15. 56	·1425					
9. 51	19. 25	16. 4	·1420					
9. 57	22. 0	16. 18	·1421					
10. 5	23. 5	16. 56	·1433					
10. 10	21. 0	17. 20	·1424					
10. 27	18. 15	17. 48	·1422					
10. 39	18. 15	18. 44	·1432					
10. 51	19. 0	19. 12	·1422					
10. 57	18. 20	19. 23	·1426					
11. 3	19. 10	19. 26	·1421					
*11. 9	17. 55	19. 33	·1428					
11. 23	19. 0	19. 43	·1424					
11. 27	18. 20	20. 0	·1428					
11. 39:	18. 0	20. 12	·1422					
11. 53	19. 55	20. 18	·1426					
12. 14	19. 35	20. 41	·1422					
12. 33	20. 15	21. 9	·1427					
12. 51	18. 0	21. 41	·1421					
12. 58	18. 40		***					
13. 24	17. 25	22. 40	·1421					
13. 36	17. 45		(†)					
13. 44	19. 10	23. 56	·1416					
13. 59	19. 30	23. 59	·1417					
14. 7	20. 55							
14. 17	20. 55							
14. 36	23. 5							
14. 51	21. 20							
15. 21	21. 20							
15. 37:	22. 15							
15. 51	21. 55							
16. 0	23. 50							
16. 11	22. 0							
16. 27	20. 35							
16. 50	22. 45							
17. 0	21. 55							
	***							
17. 28	23. 50							
17. 36	23. 0							
17. 39	23. 20							
17. 54	21. 55							
17. 58	22. 10							
18. 16	20. 25							
18. 28	21. 45							
18. 44	20. 50							
18. 56	20. 55							
19. 13	19. 20							
19. 24	20. 55							
19. 27	19. 45							
19. 33	21. 30							
19. 56	21. 0							
20. 3	21. 10							
20. 14	20. 10							
20. 26	21. 15							
20. 28	20. 55							
20. 44	21. 0							
20. 47	22. 40							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H.F. Magnet.	Of V.F. Magnet.
Nov. 19								
h m	° ′ ″	h m		h m		h m	°	°
20. 55	20. 21. 10							
21. 5	22. 10							
21. 24	21. 0							
21. 27	21. 20							
21. 33	20. 50							
21. 43	22. 5							
21. 53	21. 40							
22. 7	23. 0							
22. 11	22. 40							
22. 15	23. 10							
22. 24	22. 5							
22. 27	23. 0							
22. 29	22. 50							
22. 32	24. 25							
22. 36	22. 40							
	(†)							
23. 51	27. 5							
23. 59	27. 45							
Nov. 20		Nov. 20		Nov. 20		Nov. 20		
0. 0	20. 27. 45	0. 0	·1417	0. 0	·02090	0. 0	50·6	51·0
0. 7	26. 55	0. 5	·1419	1. 14	·02104	1. 0	51·5	52·6
0. 11	27. 0	0. 14	·1402	3. 44	·02122	2. 0	51·7	52·8
0. 17	23. 50	0. 20	·1418	4. 26	·02132	3. 0	51·8	53·0
0. 27	24. 55	0. 22	·1412	7. 54	·02123	9. 0	51·4	52·5
0. 31	22. 25	0. 36	·1425	8. 10	·02129	21. 0	50·3	50·5
	***		(†)	8. 28	·02105	22. 0	50·1	50·9
0. 49	23. 50	1. 0	·1429	9. 26	·02132	23. 0	50·2	50·4
1. 21	24. 35	1. 37	·1432	10. 15	·02076			
1. 53	27. 50	1. 59	·1432	11. 11	·02092			
2. 10	27. 10	2. 23	·1428	13. 0	·02065			
2. 38	27. 20	2. 36	·1430	13. 36	·02076			
2. 59:	27. 55	2. 53	·1428	19. 45	·02040			
3. 53	21. 25	3. 4	·1428	22. 44	·02013			
4. 6	22. 0	3. 32	·1406	23. 50	·02035			
4. 25	25. 5	3. 55	·1407	23. 56	·02022			
4. 28	25. 5	4. 19	·1424		(†)			
4. 46	27. 10	4. 37	·1421					
5. 11	24. 55	4. 57	·1426					
5. 42	24. 55	5. 41	·1426					
5. 53	25. 10	5. 54	·1429					
6. 20	23. 40	6. 9	·1420					
6. 33	20. 50	6. 26	·1424					
7. 6	23. 5	6. 36	·1419					
7. 21	22. 40	6. 55	·1429					
7. 38	20. 0	7. 13	·1426					
7. 53	16. 5	7. 38	·1429					
8. 12	20. 55	7. 56	·1420					
8. 28	19. 40	8. 26	·1431					
8. 53	12. 50	8. 59	·1411					
8. 59	11. 55	9. 23	·1426					
9. 13	10. 0	9. 43	·1467					
9. 36	19. 10	10. 23	·1428					
9. 59	17. 55	11. 4	·1418					
10. 33	10. 55	11. 40	·1415					
10. 53	14. 30	12. 21	·1426					
11. 5	16. 20	12. 32	·1425					
11. 41	17. 0	12. 46	·1429					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.20		Nov.20						
h m	° ′ ″	h m		h m		h m	°	°
11. 56	20. 18. 50	13. 13	·1414					
12. 14	16. 0	13. 32	·1419					
12. 23	17. 5	13. 53	·1414					
12. 29	16. 40		***					
12. 41	16. 50	15. 11	·1424					
12. 53	17. 55	15. 32	·1423					
13. 4	15. 0	15. 58	·1414					
13. 23	14. 30	16. 28	·1421					
13. 40	21. 50	16. 46	·1417					
13. 56	23. 0	18. 12	·1427					
14. 8	22. 50	18. 50	·1427					
14. 20	24. 5		***					
14. 28	23. 20	19. 6	·1431					
14. 41	23. 40	19. 17	·1428					
15. 24	21. 55	19. 36	·1430					
15. 52	23. 40	20. 6	·1425					
16. 3	23. 20	21. 56	·1425					
16. 10	24. 0		***					
16. 16	23. 55	22. 43	·1401					
16. 38:	26. 0		***					
16. 55	25. 50	23. 28	·1421					
17. 13	23. 30		***					
17. 32	22. 40	23. 51	·1417					
17. 44	23. 15	23. 59	·1421					
17. 56	22. 45							
18. 26	21. 50							
18. 41	22. 55							
18. 44	22. 20							
18. 56	23. 10							
19. 3	22. 30							
19. 14	23. 0							
19. 43	21. 55							
20. 21	21. 30							
20. 56	22. 15							
	(†)							
21. 0	21. 16							
21. 56	23. 20							
22. 8	24. 55							
	***							
22. 50	24. 50							
22. 56	23. 30							
23. 4	24. 45							
23. 9	24. 10							
23. 12	25. 0							
23. 20	24. 15							
23. 27	26. 10							
23. 41	31. 10							
23. 47	28. 0							
23. 59	30. 25							
Nov.21		Nov.21		Nov.21		Nov.21		
0. 0	20. 30. 25	0. 0	·1421	1. 0	·02033*	0. 0	50·7	50·9
0. 12	27. 55	0. 9	·1413	3. 0	·02052*	1. 0	51·1	51·9
	(†)		(†)	9. 0	·02066*	3. 0	51·5	51·9
1. 0	28. 18*	1. 0	·1429*	21. 0	·02007*	9. 0	52·0	52·4
1. 12	24. 45	1. 43	·1429			21. 0	51·7	52·9
	***	2. 32	·1431			22. 0	51·7	52·9
1. 38	23. 45	3. 14	·1430			23. 0	51·7	52·9

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.21		Nov.21						
h m	° ′ ″	h m		h m		h m	°	°
2. 3	20. 25. 40	3. 49	·1438					
2. 39	25. 40	4. 18	·1431					
3. 8	24. 35	4. 56	·1432					
3. 26	25. 10	5. 11	·1437					
3. 51	23. 55	5. 53	·1433					
4. 14	23. 10	6. 14	·1420					
4. 25	22. 30	6. 41	·1434					
5. 28	24. 10	7. 2	·1429					
5. 59	22. 50	7. 33	·1434					
6. 21	15. 0	8. 41	·1434					
6. 43	20. 55	9. 18	·1430					
6. 53	20. 55	10. 2	·1431					
6. 57	20. 20	10. 16	·1435					
7. 16	20. 40	10. 36	·1430					
7. 33	22. 0	10. 51	·1430					
8. 7	22. 5	11. 4	·1434					
8. 18	22. 45	11. 43	·1427					
8. 40	21. 30	12. 0	·1428					
8. 58	21. 45	12. 13	·1431					
9. 12	20. 55	12. 26	·1427					
10. 5	20. 50	12. 43	·1430					
10. 14	20. 0	13. 13	·1429					
10. 42	21. 55	16. 23	·1435					
10. 56	20. 20	19. 8	·1436					
11. 21	22. 0	20. 48	·1432					
11. 33	22. 0	21. 43	·1426					
11. 51	21. 20	22. 41	·1433					
11. 58	21. 35	22. 58	·1429					
12. 9	22. 50	23. 59	·1431					
12. 26	22. 0							
12. 35	22. 30							
12. 47	23. 10							
13. 23	22. 40							
13. 38	23. 35							
13. 43	23. 35							
13. 49	23. 0							
13. 55	23. 55							
13. 59	23. 5							
14. 19	23. 0							
14. 26	23. 30							
14. 33	23. 30							
14. 55	24. 40							
15. 9	23. 55							
15. 26	23. 40							
15. 29	22. 45							
15. 41	23. 30							
16. 0	22. 50							
16. 8	23. 25							
16. 33	22. 45							
16. 53	23. 10							
17. 11	22. 40							
17. 28	23. 0							
17. 40	22. 40							
19. 28	22. 30							
20. 27	21. 40							
20. 37	22. 0							
20. 59	21. 45							
22. 33	24. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.21								
h m	° ′ ″	h m		h m		h m	°	°
22. 43	20. 26. 30							
22. 59	25. 0							
23. 15	26. 10							
23. 28	25. 30							
23. 41	25. 30							
23. 53	27. 0							
23. 59	26. 25							
Nov.22		Nov.22		Nov.22		Nov.22		
0. 0	20. 26. 25	0. 0	·1431	1. 0	·02037*	0. 0	52·0	53·1
0. 50	25. 35	0. 41	·1436	3. 0	·02067*	1. 0	52·0	53·1
0. 56	26. 5	1. 41	·1432	9. 0	·02062*	2. 0	52·4	53·6
1. 9	25. 50	2. 46	·1440	21. 0	·02024*	3. 0	52·5	53·5
1. 28	23. 40	5. 8	·1435			9. 0	52·6	53·7
4. 9	23. 0	5. 54	·1443			21. 0	52·1	53·0
4. 27	23. 50	6. 26	·1435			22. 0	52·2	53·0
4. 37	23. 20	6. 56	·1437			23. 0	53·1	54·0
4. 54:	23. 10	7. 12	·1433					
5. 10	19. 50	7. 38	·1439					
5. 24	18. 50	7. 53	·1435					
5. 34	19. 10	8. 3	·1439					
5. 41	19. 0	8. 28	·1433					
6. 23	23. 5	9. 26	·1436					
6. 34	22. 20	10. 6	·1432					
6. 41	22. 35	11. 45	·1435					
6. 49	22. 5	12. 41	·1429					
6. 56	22. 30	13. 35	·1440					
7. 8	20. 45	14. 21	·1433					
7. 17	19. 0	14. 50	·1431					
7. 54	20. 10	18. 23	·1435					
7. 59	19. 50	18. 50	·1433					
8. 37	21. 15	19. 22	·1436					
8. 54	21. 10	19. 40	·1432					
9. 6	20. 10	19. 58	·1437					
9. 17	20. 30	20. 4	·1432					
10. 16	20. 15	20. 12	·1438					
11. 26	20. 45	20. 18	·1432					
11. 55	19. 55	21. 30	·1428					
12. 44	22. 20	21. 57	·1426					
13. 7	26. 0		***					
13. 55:	20. 30	22. 32	·1429					
14. 7	21. 5	23. 30	·1419					
14. 28	23. 20	23. 59	·1422					
14. 41	23. 30							
14. 57	22. 20							
15. 11	23. 10							
15. 58	22. 30							
16. 20	22. 50							
16. 41	21. 45							
17. 13	22. 40							
17. 23	22. 20							
17. 33	22. 50							
17. 43	22. 0							
18. 16	22. 40							
18. 26	21. 55							
18. 54	22. 10							
19. 7	21. 30							
19. 23	21. 25							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H.F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.22								
h m	° ′ ″	h m		h m		h m	°	°
19. 32	20. 20. 55							
20. 5	21. 50							
20. 9	22. 20							
20. 17	21. 50							
20. 33	21. 10							
21. 8	21. 30							
21. 33	22. 25							
21. 42	23. 30							
21. 55	23. 50							
22. 2	24. 0							
22. 9	23. 30							
22. 17	24. 35							
22. 26	24. 20							
22. 43	25. 25							
22. 58	25. 0							
23. 24	25. 55							
23. 33	25. 25							
23. 53	25. 40							
23. 57	24. 55							
23. 59	25. 15							
Nov.23		Nov.23		Nov.23		Nov.23		
0. 0	20. 25. 15	0. 0	·1422	1. 0	·02145*	0. 0	54·4	55·3
0. 12	24. 30	0. 30	·1419	3. 0	·02229*	1. 0	55·9	56·8
0. 27	25. 40		(†)	9. 0	·02272*	2. 0	56·1	57·5
1. 13	25. 40	1. 0	·1429*	21. 0	·02268*	3. 0	55·8	57·0
1. 54	24. 50	2. 8	·1432			9. 0	56·7	58·0
7. 23	22. 55	3. 0	·1436			21. 0	55·8	56·6
8. 6	22. 30	5. 41	·1435			22. 0	55·2	55·5
8. 32	22. 50	9. 3	·1429			23. 0	54·4	54·4
9. 44	22. 5	12. 56	·1426					
12. 30	22. 25	15. 59	·1428					
13. 43	23. 0	16. 26	·1425					
14. 6	23. 50	17. 6	·1430					
14. 19	23. 25	17. 36	·1429					
14. 51	23. 40	18. 26	·1430					
15. 8	25. 5	21. 11	·1426					
15. 21	24. 10		(†)					
15. 38	23. 45							
15. 50	24. 45							
15. 59	24. 25							
16. 18	26. 30							
16. 38	25. 50							
16. 55	23. 45							
17. 24	22. 50							
18. 0	23. 0							
18. 11	22. 30							
20. 8	22. 0							
21. 11	22. 30							
	(†)							
Nov.24		Nov.24		Nov.24		Nov.24		
	(†)		(†)		(†)	0. 0	54·0	54·0
1. 0	20. 25. 48*	1. 0	·1431*	1. 0	·02210*	1. 0	54·0	53·9
2. 51	24. 30	3. 0	·1429*	3. 0	·02205*	2. 0	53·5	53·6
3. 3	24. 10	6. 14	·1432	5. 11	·02214	3. 0	53·4	53·6
3. 19	24. 30	9. 8	·1430	8. 52	·02257	4. 0	54·1	55·0
8. 32	22. 30	9. 24	·1435	16. 6	·02298	9. 0	55·2	56·6

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.24		Nov.24		Nov.24		Nov.24		
h m	° ′ ″	h m		h m		h m	°	°
8.41	20.21.20	11.21	·1429	21.51	·02300	21.40	56·5	57·7
9. 6	21.55	12. 9	·1430	23.59	·02277			
9.21	19.30	12.48	·1427					
10. 4	21.10	19.37	·1434					
10.32	21. 0	21.28	·1425					
10.56	19.45	22.39	·1425					
11. 9	20.50	22.53	·1430					
11.29	20. 5	23.26	·1429					
12. 4	21.20	23.59	·1431					
12.41	20.50							
12.57	22. 5							
13.14	22. 0							
13.29	22.50							
13.51	22.20							
14.24	23.25							
14.45	22.50							
14.58	23.30							
15.17	23. 5							
15.43	23.45							
16. 3	23. 5							
17.42	23. 0							
17.53	22.25							
21.12	21.55							
22.44	24. 0							
22.53	25.10							
23.59	25.10							
Nov.25		Nov.25		Nov.25		Nov.25		
0. 0	20.25.10	0. 0	·1431	0. 0	·02277	0. 5	56·5	57·7
1.27	25. 0	1.35	·1432	1.14	·02296	8.45	55·7	56·9
3.26	23.20	4.12	·1430	4.12	·02318	21. 0	55·0	56·0
4. 1	23.35	5. 3	·1423	8.57	·02312	22. 0	55·0	55·6
4.51	25.30	6. 8	·1432	10.23	·02293	23. 0	55·0	55·8
6.37	23.20	6.40	·1432	15.11	·02306			
6.59	23.55	7.48	·1420	20.12	·02266			
7.13	23.20	8. 9	·1429	23.53	·02248			
7.28	23.40	8.27	·1424		(†)			
7.51	19.40	8.50	·1426					
7.58	17.30	9.53	·1423					
8.10	17. 0	10.10	·1427					
8.25	17.25	10.48	·1425					
8.34	19.30	11. 4	·1429					
8.55	20.40	14.55	·1429					
10.18	21. 0	18.53	·1434					
10.55	22.25	19.53	·1434					
11.14	22. 0	20.39	·1422					
11.39	22.45	21.56	·1418					
11.56	22.10	22.11	·1427					
12.13	23.30	23.41	·1440					
12.23	25.20	23.59	·1436					
12.56	23.20							
13.56	23. 0							
14. 8	23.30							
16.38	22.55							
16.55	22.25							
17.16	22.45							
17.23	22.25							
17.44	23. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.25								
h m	° ′ ″	h m		h m		h m	°	°
18.22	20.22.45							
18.33	23. 0							
19. 3	22.35							
19.11	23. 0							
19.41	22.20							
20. 0	22.50							
20.11	22.30							
20.42	24. 5							
20.54	23.10							
21. 8	23.45							
21.11	23.10							
21.53	23.35							
22. 6	25.10							
22.39	23.15							
22.43	24.20							
22.49	23. 0							
22.55	23.40							
22.58	25.10							
23. 8	25.15							
23.11	24. 0							
	***							
23.24	26.15							
23.27	27.50							
23.29	27.30							
23.48	29.45							
23.59	28.20							
Nov.26		Nov.26		Nov.26		Nov.26		
0. 0	20.28.20	0. 0	·1436		(†)	0. 0	55·2	56·0
0.12	26.55	0.33	·1423	1. 0	·02293	1. 0	55·8	56·7
0.21	28. 0	0.39	·1411	3. 0	·02443	2. 0	55·9	57·0
0.26	27. 0	0.45	·1418	4.11	·02460	3. 0	56·1	57·0
0.30	27.50	0.58	·1406	4.26	·02460	9. 0	56·1	57·2
0.38	26. 5	1.23	·1408	4.36	·02516	21. 0	55·7	56·7
0.44	30.25	1.39	·1390	4.54	·02543	22. 0	56·1	57·0
0.53	29.25	1.49	·1399	5.14	·02516	23. 0	56·2	57·4
1. 6	31. 0	1.58	·1396	5.40	·02510			
1.21	34.10	2. 6	·1406	5.55	·02485			
1.33	32.30	2.18	·1396	6.18	·02465			
1.39	32.40	2.25	·1410	6.41	·02479			
1.53	36.50	2.38	·1404	6.57	·02423			
2. 3	35.45	2.50	·1410	7.12	·02400			
2. 8	37.30	3. 2	·1401	7.44	·02458			
2.11	38.20	3.23	·1448	8.52	·02400			
2.14	36. 5	3.26	·1408	10.23	·02376			
2.26	35. 0	3.29	·1436	11.35	·02347			
2.32	35.35	3.43	·1384	11.43	·02363			
2.39	33.45	3.53	.1408	12. 0	·02346			
2.43	33.30	3.57	·1401	14.55	·02348			
2.50	32.45	4. 9	·1416	19.18	·02332			
2.58	37.45	4.24	·1388	21.30	·02297			
3. 3	36.30	4.35	·1411	23.59	·02291			
3. 8	26. 0	4.43	·1391					
	***	4.57	·1407					
3.23	22.10	5. 5	·1396					
3.26	25.50	5.25	·1391					
3.31	12.15	5.36	·1405					
3.36	29.55	5.43	·1398					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.26		Nov.26						
h m	° ′ ″	h m		h m		h m	°	°
3. 51	20. 9. 0	5. 54	·1406					
3. 56	14. 20	6. 14	·1402					
4. 10	26. 0	6. 23	·1405					
4. 16	39. 30	6. 35	·1391					
4. 19	40. 20	6. 50	·1433					
4. 30	31. 10	6. 58	·1414					
4. 41	42. 10	7. 4	·1415					
4. 50	33. 50	7. 11	·1383					
4. 55	30. 10	7. 20	·1399					
5. 3	35. 25	7. 29	·1376					
5. 10	33. 50	7. 43	·1392					
5. 13	34. 25	7. 45	·1388					
5. 25	33. 30	8. 3	·1399					
5. 29	29. 40	8. 14	·1397					
5. 39	32. 45	8. 28	·1407					
5. 51	29. 20	8. 38	·1400					
5. 57	32. 30	8. 53	·1405					
6. 7	33. 55	8. 58	·1395					
6. 21	32. 45	9. 14	·1437					
6. 27	33. 10	9. 32	·1392					
6. 39	20. 10	10. 48	·1402					
6. 51	31. 45	10. 56	·1398					
6. 57	27. 55	11. 23	·1408					
7. 3	27. 10	11. 39	·1394					
7. 7	30. 0	11. 56	·1418					
7. 12	20. 0	12. 9	·1402					
7. 23	25. 10	12. 18	·1395					
7. 33	21. 10	12. 41	·1404					
7. 37	20. 25	12. 53	·1400					
7. 46	23. 5	13. 9	·1404					
7. 59	26. 55	13. 23	·1400					
8. 11	26. 40	13. 32	·1402					
8. 20	24. 0	13. 43	·1398					
8. 27	26. 0	14. 11	·1401					
8. 30	26. 25	14. 25	·1397					
8. 39	24. 30	14. 44	·1408					
8. 53	25. 50	14. 55	·1404					
9. 1	14. 10	15. 4	·1407					
9. 18	27. 0	15. 15	·1404					
9. 33	17. 35	15. 32	·1409					
9. 45	15. 40	15. 51	·1408					
9. 56	17. 5	16. 53	·1415					
10. 0	16. 40	17. 13	·1413					
10. 11	18. 30	19. 11	·1416					
10. 17	18. 30	19. 28	·1419					
10. 26	19. 35	19. 52	·1417					
10. 36	19. 0	21. 0	·1421					
10. 43	19. 55	21. 29	·1427					
10. 49	19. 10	22. 3	·1426					
10. 57	20. 0		***					
11. 4	20. 0	22. 56	·1417					
11. 12	22. 30	23. 33	·1420					
11. 21	23. 20	23. 43	·1415					
11. 34	16. 0	23. 59	·1419					
11. 53	23. 40							
11. 58	21. 50							
12. 39	19. 5							
13. 10	21. 20							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov.26								
h m	° ′ ″	h m		h m		h m	°	°
13. 17	20. 22. 15							
13. 30	21. 20							
13. 41	22. 55							
13. 53	22. 0							
14. 3	20. 30							
14. 7	21. 10							
14. 15	20. 25							
14. 20	20. 25							
14. 28	18. 50							
14. 33	18. 10							
14. 54	22. 0							
15. 0	21. 50							
15. 4	22. 30							
15. 12	22. 40							
15. 21	21. 50							
15. 41	24. 10							
15. 57	23. 0							
16. 7	23. 40							
16. 13	23. 5							
16. 44	23. 30							
	***							
17. 59	22. 30							
18. 36	23. 5							
19. 12	22. 30							
19. 28	23. 40							
19. 42	22. 30							
19. 56	23. 45							
20. 5	23. 0							
20. 20	22. 50							
20. 27	23. 35							
20. 39	23. 5							
20. 43	23. 45							
21. 7	23. 20							
	***							
21. 41	25. 0							
21. 49	24. 20							
22. 6	25. 25							
22. 36	24. 40							
22. 38	26. 0							
22. 43	24. 30							
22. 57	25. 10							
23. 22	25. 20							
23. 34	24. 30							
23. 59	24. 50							
Nov.27		Nov.27		Nov.27		Nov.27		
0. 0	20. 24. 50	0. 0	·1419	0. 0	·02291	0. 0	56 ·6	57 ·7
1. 33	24. 50	0. 30	·1420	3. 11	·02362	1. 0	57 ·3	58 ·1
3. 0	23. 35	1. 33	·1425	6. 11	·02383	3. 0	57 ·4	57 ·6
4. 23	23. 35	3. 29	·1419	9. 5	·02367	9. 0	56 ·4	57 ·5
5. 41	24. 10	6. 13	·1421	15. 25	·02307	21. 0	54 ·2	55 ·1
6. 47	23. 50	7. 39	·1416	19. 42	·02276	22. 0	54 ·5	55 ·4
6. 58	23. 10	8. 41	·1417	22. 6	·02252	23. 0	54 ·5	55 ·4
7. 9	23. 45	8. 52	·1414	23. 59	·02255			
7. 33	22. 55	10. 10	·1418					
8. 21	22. 20	10. 38	·1415					
9. 24	22. 40	10. 57	·1419					
9. 58	21. 20	12. 3	·1415					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.27		Nov.27						
h m	° ′ ″	h m		h m		h m	°	°
10. 4	20. 21. 45	12. 23	·1418					
10. 13	21. 0	13. 18	·1416					
10. 38	21. 25	14. 24	·1420					
10. 50	22. 5	15. 27	·1420					
10. 59	22. 5	15. 41	·1427					
11. 12	21. 40	16. 21	·1432					
12. 2	22. 40	16. 58	·1429					
12. 32	22. 30	17. 6	·1431					
14. 19	24. 5	17. 54	·1429					
14. 56	22. 40	18. 33	·1423					
15. 33	24. 10	18. 51	·1424					
15. 38	26. 5	19. 6	·1428					
15. 51	24. 50	20. 23	·1429					
16. 21	24. 45	20. 56	·1424					
16. 38	23. 40	21. 9	·1425					
16. 55	24. 25	21. 48	·1416					
17. 5	23. 30	22. 3	·1419					
17. 8	24. 0	22. 26	·1411					
17. 28	23. 20	22. 56	·1410					
17. 39	23. 35	23. 0	·1415					
17. 49	23. 5		***					
17. 55	23. 20	23. 59	·1413					
17. 59	24. 45							
18. 3	22. 40							
18. 42	25. 5							
19. 26	23. 30							
19. 39	23. 40							
20. 6	23. 0							
	***							
21. 4	22. 40							
21. 17	24. 30							
21. 25	24. 0							
21. 33	24. 25							
21. 53	23. 30							
22. 8	23. 30							
22. 12	24. 20							
22. 23	24. 5							
22. 33	25. 0							
22. 43	24. 20							
22. 53	25. 30							
23. 4	25. 40							
23. 8	25. 0							
23. 18	26. 50							
23. 26	25. 25							
23. 44	24. 35							
23. 59	24. 40							
Nov.28		Nov.28		Nov.28		Nov.28		
0. 0	20. 24. 40	0. 0	·1413	0. 0	·02255	0. 0	55·0	56·0
0. 26	25. 30	0. 18	·1420	1. 57	·02283	1. 0	55·4	56·2
0. 51	25. 30	0. 53	·1418	4. 41	·02300	2. 0	55·4	56·3
1. 3	24. 50	1. 7	·1424	6. 18	·02294	3. 0	55·4	56·2
1. 41	26. 50		***	7. 24	·02318	9. 0	55·0	55·6
1. 52	25. 30	2. 9	·1426	8. 0	·02300	21. 0	52·2	52·9
2. 18	27. 25	2. 11	·1422	9. 1	·02284	22. 0	52·6	53·3
2. 36	26. 30	2. 17	·1427	11. 19	·02237	23. 0	53·0	53·6
2. 47	24. 30	2. 26	·1418	12. 13	·02219			
2. 58	23. 30		***	13. 14	·02184			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Nov.28		Nov.28		Nov.28				
h m	° ′ ″	h m		h m		h m	°	°
3. 9	20. 25. 0	2. 43	·1417	13. 28	·02184			
3. 14	22. 40	2. 53	·1424	14. 8	·02160			
3. 26	22. 0	2. 58	·1418	16. 22	·02168			
3. 51	23. 0	3. 13	·1416	20. 56	·02137			
4. 3	21. 55	3. 26	·1423	21. 33	·02116			
4. 15	22. 0	3. 39	·1418	23. 59	·02122			
4. 33	24. 10	3. 57	·1419					
4. 51	23. 55	4. 23	·1428					
4. 58	24. 45	5. 14	·1431					
5. 9	24. 25	5. 29	·1427					
5. 17	25. 40	5. 44	·1428					
5. 26	25. 25	6. 13	·1419					
5. 42	26. 55	6. 31	·1405					
5. 51	28. 0	6. 44	·1410					
6. 0	28. 10	7. 5	·1402					
6. 23	24. 40	7. 23	·1410					
6. 40	23. 0	7. 37	·1423					
6. 55	20. 55	7. 44	·1422					
7. 9	19. 55	8. 3	·1429					
7. 21	20. 50	8. 11	·1415					
7. 39	24. 25	8. 26	·1411					
	***	8. 43	·1417					
8. 5	22. 20	8. 56	·1433					
8. 14	23. 30	9. 14	·1425					
8. 28	22. 0	9. 29	·1426					
8. 45	10. 0	9. 43	·1412					
8. 57	12. 40	10. 29	·1419					
9. 3	12. 10	10. 43	·1426					
9. 14	8. 40	11. 30	·1419					
9. 33	15. 20	12. 6	·1428					
9. 44	12. 20	12. 14	·1423					
9. 58	17. 0	12. 28	·1427					
10. 12	19. 20	12. 42	·1432					
10. 17	19. 20	13. 26	·1415					
10. 29	20. 35	14. 10	·1433					
10. 40	20. 35	14. 43	·1424					
10. 51	21. 45	16. 21	·1424					
11. 12	18. 30	16. 34	·1434					
11. 29	18. 0	17. 32	·1424					
11. 44	18. 20	17. 54	·1430					
12. 9	22. 10	19. 14	·1429					
12. 25	19. 45	19. 58	·1419					
12. 28	20. 30	20. 56	·1430					
12. 38	18. 55	21. 36	·1418					
12. 43	21. 10	21. 49	·1404					
12. 51	21. 10	22. 53	·1416					
13. 10	29. 20	23. 17	·1413					
13. 21	27. 50	23. 37	·1417					
13. 26	26. 0	23. 59	·1413					
13. 53	21. 5							
14. 29	23. 10							
14. 50	21. 45							
15. 43	23. 40							
15. 56	22. 0							
16. 28	24. 30							
16. 33	24. 20							
16. 55	26. 10							
17. 7	24. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 28								
h m	° ′ ″	h m		h m		h m	°	°
17. 12	20. 24. 55							
17. 28	23. 35							
17. 35	23. 30							
17. 41	24. 5							
17. 56	23. 25							
18. 13	25. 30							
18. 38	24. 55							
18. 59	25. 20							
19. 17	24. 45							
19. 41	22. 25							
20. 11	23. 50							
20. 33	26. 25							
20. 50	25. 5							
20. 57	25. 0							
21. 21	28. 20							
21. 36	31. 20							
21. 43	31. 15							
22. 10	25. 35							
22. 26	26. 50							
22. 43	25. 0							
23. 9	29. 10							
23. 24	28. 15							
23. 59	26. 10							
Nov. 29		Nov. 29		Nov. 29		Nov. 29		
0. 0	20. 26. 10	0. 0	·1413	0. 0	·02122	0. 0	53·2	54·1
0. 21	25. 0	1. 25	·1431	0. 41	·02147	1. 0	54·0	55·0
0. 47	24. 30	2. 11	·1425	2. 13	·02198	2. 0	54·2	55·2
1. 28	25. 50	2. 26	·1417	5. 55	·02224	3. 0	54·4	55·5
1. 41	25. 5	2. 33	·1418	7. 12	·02257	9. 0	54·0	55·1
2. 14	25. 55	2. 47	·1414	7. 29	·02226	21. 0	53·9	54·9
2. 34	23. 40	3. 17	·1416	7. 41	·02275	22. 0	54·0	55·1
2. 43	24. 30	3. 44	·1429	8. 12	·02184	23. 0	54·5	55·6
2. 58	22. 15	3. 58	·1428	8. 34	·02220			
3. 21:	18. 55	5. 29	·1426	9. 21	·02210			
3. 42	18. 10	6. 9	·1410	14. 21	·02244			
4. 4	23. 15	6. 53	·1410	20. 25	·02192			
4. 21	22. 10	7. 26	·1432	23. 59	·02212			
4. 34	21. 50	7. 41	·1422					
4. 58	24. 25	7. 44	·1454					
5. 27	24. 45	8. 3	·1442					
5. 38	23. 15	8. 22	·1396					
5. 49	23. 30	8. 44	·1443					
6. 4	22. 45	9. 16	·1408					
6. 21	23. 0	10. 40	·1421					
6. 49	21. 20	11. 39	·1421					
6. 54	22. 0	11. 55	·1417					
7. 6	19. 40	15. 25	·1422					
7. 23	9. 20	15. 48	·1418					
7. 26	9. 55	16. 56	·1418					
7. 34	8. 0	17. 39	·1425					
7. 44	14. 50	18. 23	·1420					
7. 58	5. 10	18. 53	·1425					
8. 10	25. 40	20. 3	·1422					
8. 21	26. 45	20. 57	·1415					
8. 27	29. 45	21. 26	·1401					
8. 53	9. 55	21. 56	·1410					
9. 13	20. 10	22. 43	·1415					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 29		Nov. 29						
h m	° ′ ″	h m		h m		h m	°	°
9. 38	20. 16. 50	23. 38	·1415					
9. 55	17. 15	23. 59	·1411					
10. 12	20. 10							
10. 38	22. 50							
11. 1	23. 30							
11. 33	22. 30							
11. 55	23. 0							
12. 32	22. 20							
12. 51	22. 40							
13. 7:	23. 40							
13. 18	22. 55							
13. 51	23. 20							
14. 12	22. 50							
14. 29	24. 45							
14. 54	23. 40							
15. 11	23. 10							
15. 44	23. 40							
15. 55	24. 35							
16. 9	25. 10							
16. 26	24. 45							
16. 39	25. 25							
16. 55	24. 50							
17. 7	25. 45							
17. 14	25. 10							
17. 54	26. 0							
18. 13	26. 50							
18. 24	26. 25							
18. 29	27. 0							
19. 4	26. 15							
19. 14	25. 30							
19. 21	25. 50							
19. 40	24. 35							
20. 39	24. 10							
21. 21	25. 0							
21. 28	24. 25							
22. 10	25. 55							
22. 30	25. 0							
22. 42	25. 10							
23. 2	26. 25							
23. 33	27. 20							
23. 42	26. 40							
23. 48	27. 15							
23. 59	26. 25							
Nov. 30		Nov. 30		Nov. 30		Nov. 30		
0. 0	20. 26. 25	0. 0	·1411	0. 0	·02212	0. 0	54·8	56·0
0. 58	28. 0	0. 4	·1411	5. 12	·02304	1. 0	55·6	56·8
1. 40	26. 20		(†)	5. 56	·02300	2. 0	55·6	56·8
2. 26	25. 45	1. 0	·1413	7. 11	·02263	3. 0	55·6	57·0
2. 36	24. 40	1. 27	·1412	13. 12	·02160	4. 20	55·7	57·0
3. 0	26. 30	2. 28	·1409	22. 30	·02041	9. 0	54·1	55·0
3. 17	25. 50	2. 43	·1412	23. 59	·02048	21. 0	50·8	51·8
3. 31	27. 40	2. 59	·1406			22. 0	51·2	52·2
3. 53	23. 40	3. 14	·1409			23. 0	52·0	53·0
4. 6	23. 40	3. 35	·1404					
4. 13	25. 0	4. 13	·1408					
4. 42	21. 35	4. 32	·1400					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Nov. 30		Nov. 30						
h m	° ′ ″	h m		h m		h m	°	°
4. 51	20. 22. 40	4. 41	·1410					
4. 58	19. 45	4. 57	·1409					
5. 3	21. 0	5. 4	·1417					
5. 13	17. 40	5. 14	·1414					
5. 23	17. 50	5. 21	·1419					
5. 38	12. 15	5. 33	·1414					
5. 58	20. 10	5. 48	·1433					
6. 11	19. 55	6. 17	·1416					
6. 24	18. 20	6. 40	·1422					
6. 53	20. 50	7. 2	·1414					
7. 13	19. 15	7. 21	·1418					
7. 33	21. 10	7. 43	·1416					
7. 51	21. 15	8. 18	·1424					
8. 11	22. 0	8. 48	·1422					
8. 28	21. 50	10. 43	·1423					
8. 49	20. 20	11. 25	·1429					
9. 12	21. 5	12. 30	·1422					
9. 45	20. 25	12. 44	·1425					
9. 59	21. 5	13. 30	·1424					
10. 7	20. 40	16. 59	·1431					
10. 39	21. 5	19. 14	·1429					
11. 10	20. 40	19. 37	·1431					
11. 26	21. 20	20. 40	·1426					
11. 34	20. 45	20. 54	·1430					
12. 11	22. 10	23. 59	·1425					
12. 32	22. 0							
12. 43	22. 55							
12. 58	22. 10							
14. 3	23. 0							
14. 10	23. 20							
14. 55	23. 45							
15. 41	22. 50							
15. 57	23. 0							
16. 6	24. 0							
16. 12	23. 45							
16. 27	24. 10							
16. 51	22. 40							
17. 14	22. 10							
17. 21	22. 35							
17. 36	21. 50							
17. 43	22. 25							
18. 6	21. 20							
18. 14	21. 55							
18. 53	21. 50							
19. 20	22. 25							
19. 33	22. 55							
20. 2	22. 0							
20. 32	22. 10							
20. 41	21. 20							
20. 45	22. 5							
20. 51	21. 30							
21. 4	22. 20							
21. 23	22. 20							
22. 39	23. 30							
22. 54	24. 0							
23. 59	24. 10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 1		Dec. 1		Dec. 1		Dec. 1		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 24. 10	0. 0	·1425	0. 0	·02048	0. 0	52 ·2	53 ·2
0. 9	25. 10	1. 56	·1428	2. 55	·02095	1. 0	52 ·6	53 ·9
0. 23	24. 25	2. 13	·1432	7. 12	·02117	2. 0	52 ·6	53 ·9
0. 36	24. 20	2. 46	·1429	12. 42	·02102	3. 0	52 ·6	54 ·1
0. 42	25. 0	3. 18	·1434	18. 7	·02116	9. 0	52 ·8	54 ·3
0. 53	24. 15	5. 11	·1434	23. 59	·02112	21. 0	53 ·2	55 ·0
1. 2	24. 25	5. 41	·1428					
1. 30	24. 15	6. 11	·1432					
2. 38	23. 20	6. 33	·1426					
2. 53	23. 30	8. 14	·1430					
4. 42	22. 10	9. 13	·1428					
4. 53	22. 25	9. 39	·1430					
5. 11	21. 55	9. 56	·1426					
5. 23	22. 0	11. 6	·1430					
5. 40	21. 20	14. 32	·1426					
6. 8	22. 30	16. 56	·1432					
6. 43	17. 45	19. 26	·1434					
7. 12	20. 55	21. 52	·1425					
7. 34	22. 0	22. 26	·1418					
7. 58	21. 30	22. 45	·1421					
8. 42	21. 30		(†)					
9. 8	20. 20	23. 59	·1420					
9. 28:	15. 0							
9. 48	18. 40							
10. 25	20. 0							
10. 36	18. 55							
10. 56	20. 0							
11. 35	19. 50							
12. 26	22. 0							
12. 33	21. 15							
12. 41	21. 40							
13. 13	21. 0							
13. 24	21. 45							
13. 37	21. 50							
13. 45	21. 40							
13. 54	21. 55							
14. 8	21. 20							
14. 44	22. 0							
14. 56	22. 45							
15. 14	21. 50							
15. 32	22. 20							
16. 10	21. 25							
16. 21	21. 30							
16. 27	22. 5							
17. 1	21. 30							
17. 25	22. 5							
17. 47	21. 25							
18. 2	21. 50							
18. 23	21. 20							
18. 27	21. 50							
19. 3	21. 5							
19. 13	21. 45							
19. 23	21. 20							
20. 34	21. 25							
20. 51	22. 0							
21. 2	22. 0							
21. 38	23. 20							
22. 24	25. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 1								
h m	° ′ ″	h m		h m		h m	°	°
23. 41	20. 28. 20							
23. 59	28. 0							
Dec. 2		Dec. 2		Dec. 2		Dec. 2		
0. 0	20. 28. 0	0. 0	·1420	0. 0	·02112	1. 0	53 ·0	55 ·0
0. 34	27. 5	0. 17	·1419	0. 56	·02123	8. 0	54 ·0	55 ·6
0. 54	27. 30	1. 16	·1428	3. 7	·02155	21. 0	55 ·8	57 ·3
1. 21	27. 5	2. 47	·1429	4. 41	·02172	22. 0	56 ·1	57 ·9
1. 53	24. 20	3. 28	·1423	7. 10	·02168	23. 0	56 ·6	58 ·4
2. 4	24. 30	3. 52	·1413	17. 33	·02218			
2. 18	23. 55	4. 39	·1427	20. 12	·02236			
2. 39	24. 10	5. 25	·1427	22. 59	·02257			
2. 56	25. 20	6. 10	·1432	23. 59	·02297			
3. 8	24. 40	6. 55	·1425					
3. 32	25. 10	7. 18	·1430					
3. 56	21. 5	7. 39	·1424					
4. 12	21. 5	8. 7	·1424					
4. 57	24. 0	8. 39	·1429					
5. 12	24. 15	9. 10	·1427					
5. 28	23. 0	9. 50	·1430					
5. 43:	23. 55	10. 20	·1426					
6. 2	22. 10	11. 43	·1429					
6. 20	22. 15	12. 22	·1423					
6. 33	23. 5	12. 40	·1425					
6. 44	21. 55	12. 50	·1423					
6. 53	21. 55	13. 26	·1429					
7. 8	20. 10	14. 30	·1426					
7. 18	20. 45	14. 41	·1429					
7. 39	20. 20	15. 7	·1426					
7. 54	20. 55	15. 29	·1427					
9. 6	20. 50	16. 3	·1433					
9. 28	21. 0	16. 36	·1429					
9. 41	19. 50	17. 30	·1437					
9. 57	20. 0	18. 18	·1436					
10. 5	19. 45	18. 44	·1439					
10. 15	20. 30	20. 58	·1426					
10. 19	19. 50	21. 22	·1432					
10. 30	21. 20	21. 35	·1426					
10. 51	19. 25	21. 51	·1433					
10. 59	19. 30	22. 20	·1426					
11. 21	18. 0	22. 38	·1426					
11. 42	18. 0	23. 11	·1412					
11. 59	19. 45	23. 46	·1421					
12. 3	19. 40	23. 52	·1413					
12. 11	20. 15	23. 59	·1420					
12. 22	19. 50							
12. 34	21. 5							
13. 3	19. 50							
13. 16	20. 15							
13. 28	19. 40							
13. 44	21. 15							
14. 12	21. 10							
14. 46	24. 0							
15. 8	24. 0							
15. 23	25. 35							
15. 33	25. 0							
15. 43	23. 10							
15. 51	22. 45							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 2								
h m	° ′ ″	h m		h m		h m	°	°
16. 13	20. 24. 30							
16. 28	24. 0							
16. 56	22. 10							
17. 41	21. 50							
17. 50	22. 30							
18. 26	22. 0							
18. 30	22. 20							
18. 39	21. 55							
18. 51	22. 25							
19. 5	21. 30							
19. 29	23. 30							
19. 39	23. 20							
19. 56	23. 50							
20. 8	22. 20							
20. 24	25. 0							
20. 39	24. 0							
21. 9	25. 25							
21. 29	27. 30							
21. 42	26. 15							
21. 46	27. 20							
	***							
21. 58	26. 10							
22. 11	27. 35							
	***							
22. 36	27. 0							
22. 56	25. 25							
23. 21	28. 20							
23. 26	30. 10							
23. 29	28. 10							
23. 38	27. 15							
23. 43	29. 10							
	(†)							
Dec. 3		Dec. 3		Dec. 3		Dec. 3		
	(†)	0. 0	·1420	0. 0	·02297	0. 0	57 ·0	58 ·7
0. 43	20. 30. 25	1. 0	·1425	0. 21	·02304	1. 0	57 ·7	59 ·0
0. 56	30. 5	1. 23	·1419	1. 18	·02325	2. 0	58 ·0	59 ·6
0. 59	31. 15	1. 38	·1418	2. 24	·02386	3. 0	57 ·9	59 ·6
1. 8	30. 30	1. 50	·1410	2. 57	·02400	9. 0	58 ·2	59 ·6
1. 13	31. 15	1. 57	·1413	3. 41	·02467	21. 0	59 ·9	62 ·0
1. 23	30. 40	2. 11	·1405	4. 23	·02433	22. 0	59 ·8	61 ·4
1. 32	33. 20	2. 26	·1413	7. 40	·02404	23. 0	59 ·8	61 ·3
1. 49	33. 30	2. 39	·1405	8. 11	·02416			
1. 55	32. 10	2. 48	·1411	11. 11	·02423			
1. 59	32. 5	3. 11	·1396	14. 8	·02457			
2. 18	27. 25	3. 31	·1392	19. 39	·02503			
2. 30	27. 30	4. 6	·1414	22. 41	·02535			
2. 42	31. 0	4. 50	·1414	23. 59	·02522			
2. 46	30. 50	5. 8	·1421					
3. 8	34. 30	5. 19	·1412					
3. 25	33. 20	5. 33	·1420					
3. 39	27. 10	5. 43	·1419					
3. 51	26. 15	6. 3	·1425					
3. 56	26. 55	6. 40	·1427					
4. 14	29. 40	6. 51	·1424					
4. 26	27. 50	7. 16	·1424					
4. 41	27. 50	7. 41	·1414					
4. 47	26. 55	8. 23	·1424					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 3		Dec. 3						
h m	° ′ ″	h m		h m		h m	°	°
5. 7	20. 25. 45	11. 23	·1428					
5. 19	26. 20	11. 44	·1423					
5. 26	25. 5	14. 43	·1427					
5. 39	24. 25	14. 59	·1424					
5. 57	23. 20	16. 41	·1427					
6. 10	23. 30	22. 0	·1419					
6. 24	22. 45	23. 59	·1419					
6. 49	23. 5							
7. 11	22. 45							
7. 44	20. 0							
8. 10	21. 55							
8. 33	20. 5							
8. 59	21. 30							
9. 9	21. 15							
9. 26	21. 45							
9. 33	21. 10							
10. 16	21. 0							
10. 23	21. 50							
10. 30	21. 15							
10. 41	21. 55							
11. 11	21. 10							
11. 34	21. 10							
11. 59	22. 20							
13. 21	23. 45							
13. 32	23. 20							
14. 21	23. 50							
14. 41	22. 55							
15. 12	23. 55							
15. 23	23. 25							
15. 55	24. 5							
16. 28	22. 55							
17. 26	22. 25							
17. 44	21. 45							
17. 59	22. 35							
18. 32	22. 20							
18. 51	22. 45							
20. 36	22. 30							
22. 26	24. 30							
23. 46	24. 30							
23. 59	24. 10							
Dec. 4		Dec. 4		Dec. 4		Dec. 4		
0. 0	20. 24. 10	0. 0	·1419	0. 0	·02522	0. 0	60·0	61·3
0. 12	23. 20	0. 56	·1420	2. 33	·02552	1. 0	60·1	61·3
0. 25	23. 40	5. 13	·1429	6. 41	·02501	2. 0	60·1	61·4
2. 46	21. 45	5. 56	·1426	13. 32	·02488	3. 0	60·3	61·5
2. 58	22. 30	6. 6	·1430	14. 14	·02472	9. 0	58·9	59·6
3. 11	22. 20	6. 39	·1426	17. 42	·02473	21. 0	58·8	59·8
3. 23	22. 50	9. 50	·1422	22. 44	·02457	22. 0	59·5	60·0
4. 3	22. 15	10. 12	·1431	23. 59	·02464	23. 0	59·4	60·1
4. 20	22. 25	10. 57	·1423					
4. 35	21. 40	11. 33	·1428					
5. 44	22. 25	12. 4	·1423					
5. 59	21. 15	13. 27	·1426					
6. 27	21. 55	13. 56	·1436					
8. 18	21. 30	14. 40	·1430					
8. 32	21. 0	16. 36	·1433					
8. 56	21. 40	17. 41	·1430					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 4		Dec. 4						
h m	° ′ ″	h m		h m		h m	°	°
9. 4	20. 21. 15	18. 48	·1438					
9. 11	21. 25	19. 26	·1436					
9. 25	19. 50	19. 36	·1431					
9. 33	19. 30	20. 9	·1434					
9. 41	19. 40	20. 13	·1428					
10. 2:	18. 0	20. 30	·1433					
11. 9	22. 30	22. 50	·1421					
11. 33	22. 20	23. 43	.1428					
11. 56	21. 25	23. 53	·1434					
13. 8	23. 10		(†)					
13. 26	26. 0							
13. 43	23. 25							
14. 11	21. 30							
14. 53	22. 45							
15. 43	22. 5							
17. 2	21. 55							
17. 23	23. 10							
17. 34	23. 20							
17. 51	22. 30							
18. 50	21. 45							
19. 7	22. 40							
19. 14	21. 20							
19. 42	22. 30							
19. 51	21. 25							
20. 9	22. 10							
20. 18	21. 40							
20. 53	21. 40							
20. 56	22. 30							
21. 3	22. 0							
21. 39	23. 10							
21. 42	22. 35							
21. 54	23. 20							
22. 11	23. 30							
22. 21	22. 40							
22. 27	23. 50							
23. 16	23. 50							
23. 17	25. 20							
23. 33	24. 40							
23. 45	25. 20							
23. 59	25. 0							
Dec. 5		Dec. 5		Dec. 5		Dec. 5		
0. 0	20. 25. 0		(†)	0. 0	·02464	0. 0	59·7	60·4
1. 12	24. 5	0. 38	·1429	2. 44	·02488	1. 0	59·8	60·9
2. 25	22. 20	1. 51	·1434	6. 11	·02507	2. 0	59·8	60·9
2. 33	22. 30	2. 3	·1430	7. 4	·02526	3. 0	59·9	61·0
2. 46	22. 0	4. 48	·1430	12. 56	·02484	9. 0	59·6	60·6
3. 21	22. 10	5. 21	·1420	21. 26	·02416	21. 0	57·8	58·3
3. 32	21. 50	5. 42	·1419	23. 59	·02418	22. 0	57·8	58·5
3. 41	22. 20	6. 9	·1411			23. 0	57·8	58·8
4. 39	22. 45	6. 28	·1412					
5. 6	22. 15	6. 42	·1408					
5. 15	21. 30	6. 57	·1416					
5. 39	23. 0	7. 9	·1412					
6. 7	20. 35	7. 55	·1425					
6. 24	21. 30	8. 11	·1422					
6. 44	19. 35	9. 6	·1429					
6. 58	21. 25	9. 35	·1425					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 5		Dec. 5						
h m	° ′ ″	h m		h m		h m	°	°
7. 8	20. 21. 10	10. 8	·1429					
7. 12	21. 40	10. 28	·1425					
7. 36	20. 25	18. 11	·1436					
8. 3	21. 5	18. 50	·1441					
8. 20	20. 30	19. 27	·1434					
8. 35	20. 30	20. 20	·1431					
8. 55	21. 0	20. 44	·1426					
9. 32	20. 55	21. 43	·1419					
11. 43	22. 10	22. 11	·1420					
12. 16	21. 55	22. 29	·1408					
12. 37	22. 30	23. 25	·1421					
13. 26	22. 20	23. 59	·1425					
13. 32	22. 55							
13. 42	22. 30							
14. 20	23. 5							
14. 37	22. 45							
14. 43	23. 20							
15. 2	22. 50							
15. 26	23. 0							
15. 42	22. 25							
15. 58	22. 35							
16. 12	24. 40							
16. 41	21. 55							
16. 56	21. 40							
17. 6	22. 40							
19. 9	22. 5							
19. 21	21. 20							
19. 34	22. 5							
19. 41	21. 40							
20. 14	22. 40							
20. 28	22. 0							
20. 38	22. 10							
20. 44	21. 40							
20. 57	22. 5							
21. 40	21. 15							
21. 53	22. 20							
21. 59	22. 10							
22. 40	25. 25							
23. 4:	25. 25							
23. 24	26. 50							
23. 59	25. 30							
Dec. 6		Dec. 6		Dec. 6		Dec. 6		
0. 0	20. 25. 30	0. 0	·1425	0. 0	·02418	0. 0	58 ·2	59 ·1
0. 53	25. 30	2. 2	·1428	0. 33	·02427	1. 0	58 ·8	59 ·6
1. 4	26. 0	2. 42	·1418	3. 6	·02482	2. 0	58 ·9	60 ·0
2. 6	26. 0	3. 22	·1420	5. 14	·02502	3. 0	59 ·2	60 ·0
2. 26	24. 30	3. 53	·1416	7. 52	·02495	9. 0	59 ·5	60 ·3
2. 29	24. 25	5. 10	·1416	8. 56	·02472	21. 0	57 ·9	58 ·7
2. 42	23. 30	5. 20	·1420	11. 12	·02475	22. 0	58 ·0	58 ·8
2. 56	23. 35	5. 29	·1418	11. 23	·02463	23. 0	58 ·0	58 ·8
3. 14	24. 55	5. 44	·1421	11. 40	·02476			
3. 37	25. 20	5. 57	·1422	15. 11	·02463			
3. 43	24. 55	6. 36	·1430	19. 54	·02428			
4. 6	25. 25	6. 54	·1427	23. 59	·02384			
4. 13	25. 5	7. 3	·1428					
4. 26	25. 25	7. 13	·1423					
4. 53	23. 40	7. 23	·1425					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 6		Dec. 6						
h m	° ′ ″	h m		h m		h m	°	°
5. 1	20. 22. 30	7. 29	·1423					
5. 14	22. 50	7. 47	·1436					
5. 39	21. 30	8. 3	·1432					
5. 51	21. 50	8. 13	·1434					
6. 18	20. 30	8. 21	·1432					
6. 34	21. 10	8. 37	·1438					
6. 44	21. 15	8. 52	·1431					
6. 57	20. 40	9. 23	·1446					
7. 6	20. 50	9. 50	·1439					
7. 13	18. 55	9. 58	·1440					
7. 16	18. 55	10. 16	·1432					
7. 30	15. 10	10. 36	·1434					
7. 48	19. 20	10. 50	·1433					
8. 4	18. 10	10. 57	·1434					
8. 21	19. 20	11. 3	·1431					
8. 32	19. 10	11. 25	·1436					
8. 41	20. 10	11. 32	·1419					
9. 6	13. 30	11. 51	·1435					
9. 39	17. 20	12. 6	·1430					
9. 44	17. 0	12. 33	·1433					
10. 6	18. 50	13. 6	·1430					
10. 12	18. 40	14. 4	·1429					
10. 36	19. 55	14. 14	·1431					
10. 57	19. 10	17. 4	·1434					
11. 15	20. 45	17. 32	·1431					
11. 27	20. 25	18. 53	·1434					
11. 39	22. 10	20. 20	·1433					
11. 42	22. 10	20. 48	·1428					
11. 52	23. 0	20. 59	·1426					
12. 7	22. 0	21. 28	·1427					
12. 11	22. 20	22. 1	·1422					
12. 39	21. 45	22. 26	·1425					
12. 45	22. 0	22. 53	·1423					
13. 14	21. 55	23. 43	·1427					
13. 44	22. 20	23. 59	·1427					
13. 53	22. 45							
14. 3	23. 55							
14. 11	23. 15							
14. 32	23. 45							
14. 50	23. 25							
14. 56	23. 40							
15. 14	23. 0							
15. 38	24. 5							
15. 53	23. 30							
15. 56	23. 45							
16. 41	23. 5							
17. 20	22. 55							
17. 48	24. 10							
17. 56	23. 25							
18. 12	24. 10							
18. 23	23. 55							
18. 43	23. 45							
19. 21	25. 20							
19. 59	25. 10							
20. 39	24. 20							
20. 53	24. 55							
21. 44	23. 25							
22. 23	26. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 6								
h m	° ′ ″	h m		h m		h m	°	°
22. 37	20. 26. 0							
23. 3	24. 40							
23. 43	25. 40							
23. 59	24. 10							
Dec. 7		Dec. 7		Dec. 7		Dec. 7		
0. 0	20. 24. 10	0. 0	·1427	0. 0	·02384	0. 0	58·1	59·0
0. 30	24. 30	1. 13	·1431	2. 25	·02440	1. 0	58·4	59·6
0. 47	25. 50	2. 11	·1419	3. 26	·02456	2. 0	58·4	59·6
0. 59	25. 55	2. 23	·1421	4. 20	·02464	3. 0	58·2	59·3
1. 19	25. 25	2. 38	·1415	9. 41	·02417	9. 0	57·4	58·4
1. 32	26. 0	2. 56	·1419		(†)	21. 0	56·6	57·8
1. 53	25. 10	3. 52	·1413	12. 21	·02407	22. 0	56·7	58·0
1. 59	25. 40	5. 20	·1427	15. 0	·02411	23. 0	56·9	58·1
2. 13	25. 5	7. 6	·1428	19. 25	·02380			
2. 23	25. 20	8. 59	·1422	23. 49	·02336			
2. 29	24. 10	9. 13	·1426		(†)			
2. 36	24. 0	9. 36	·1427					
2. 51	25. 10	10. 27	·1432					
2. 58	25. 0	10. 56	·1423					
3. 14	25. 45	12. 55	·1423					
3. 40	24. 20	17. 18	·1432					
3. 48	24. 30	20. 8	·1431					
3. 56	24. 0		* * *					
4. 8	25. 10	20. 56	·1431					
4. 17	24. 55	21. 13	·1425					
4. 33	25. 10	21. 37	·1425					
5. 11	24. 30	22. 13	·1427					
5. 43	23. 0	23. 59	·1425					
5. 55	23. 40							
6. 21	23. 10							
6. 44	23. 20							
7. 4	22. 10							
8. 4	22. 10							
8. 30	21. 5							
8. 51	21. 10							
9. 14	19. 5							
9. 30	18. 55							
9. 48	19. 50							
9. 58	18. 30							
10. 23	18. 15							
10. 43	19. 50							
10. 53	18. 55							
11. 29	21. 0							
12. 4	22. 0							
12. 20	22. 45							
12. 33	22. 30							
12. 44	22. 45							
12. 58	22. 15							
13. 57	23. 30							
14. 11	22. 20							
14. 53	23. 25							
15. 5	22. 45							
15. 21	23. 10							
15. 55	23. 10							
16. 11	23. 20							
16. 43	22. 50							
17. 31	23. 5							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 7								
h m	° ′ ″	h m		h m		h m	°	°
17. 39	20. 22. 30							
17. 59	22. 30							
18. 13	23. 0							
18. 23	22. 5							
18. 33	22. 45							
18. 41	22. 0							
18. 52	22. 30							
19. 26	22. 10							
19. 36	22. 40							
20. 14	21. 50							
20. 23	22. 40							
20. 32	21. 40							
21. 11	23. 10							
22. 26	22. 55							
22. 40	24. 5							
23. 9	24. 20							
23. 59	25. 40							
Dec. 8		Dec. 8		Dec. 8		Dec. 8		
0. 0	20. 25. 40	0. 0	·1425		(†)	0. 0	57·4	58·5
0. 51	26. 25	2. 17	·1422	0. 34	·02363	1. 0	57·7	58·8
1. 24	26. 10	2. 55	·1418	2. 22	·02376	3. 0	57·8	59·1
1. 46	26. 50	3. 56	·1424	3. 11	·02383	9. 0	55·7	57·0
2. 21	24. 5	4. 13	·1422	6. 26	·02395	21. 30	53·7	54·6
2. 26	24. 5	6. 2	·1428	7. 20	·02396			
2. 41	22. 25	6. 36	·1423	7. 38	·02385			
2. 53	22. 50	6. 53	·1414	7. 52	·02395			
3. 3	22. 20	7. 24	·1415	10. 10	·02340			
3. 21	23. 0	7. 36	·1420	13. 44	·02304			
3. 57	24. 10	7. 42	·1416	14. 20	·02288			
4. 20	23. 10	8. 13	·1426	23. 9	·02168			
4. 32	23. 40	8. 38	·1422		(†)			
4. 55	23. 45	9. 38	·1427					
5. 48	22. 25	11. 29	·1426					
6. 12	23. 45	11. 42	·1430					
6. 36	23. 45	11. 53	·1427					
7. 9	22. 10	12. 3	·1432					
7. 26	21. 35	12. 14	·1427					
7. 39	17. 30	13. 44	·1428					
7. 56	19. 5	13. 59	·1433					
8. 13	17. 40	14. 40	·1426					
8. 47	19. 30	16. 41	·1437					
9. 4	21. 5	19. 22	·1432					
9. 58	20. 25	19. 41	·1436					
11. 51	21. 25	20. 41	·1434					
12. 2	21. 0	21. 11	·1430					
12. 58	22. 5	22. 14	·1433					
13. 36	21. 40	23. 59	·1432					
13. 44	22. 35							
13. 58	24. 25							
14. 25	21. 45							
14. 42	22. 55							
14. 56	23. 5							
15. 3	22. 30							
15. 51	23. 10							
16. 3	22. 30							
16. 11	22. 35							
16. 43	21. 25							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 8								
h m	° ′ ″	h m		h m		h m	°	°
17. 2	20. 22. 5							
17. 11	21. 35							
17. 23	22. 5							
17. 41	21. 40							
18. 11	21. 50							
18. 23	22. 40							
18. 56	21. 45							
19. 8	21. 40							
19. 20	22. 30							
19. 44	21. 20							
19. 56	22. 0							
20. 6	22. 10							
20. 14	21. 30							
20. 59	22. 0							
21. 8	21. 30							
21. 49	22. 0							
22. 11	22. 45							
23. 22	23. 15							
23. 59	23. 0							
Dec. 9		Dec. 9		Dec. 9		Dec. 9		
0. 0	20. 23. 0	0. 0	·1432		(†)	1. 0	54 ·0	55 ·1
0. 56	23. 15	5. 23	·1435	1. 0	·02164*	9. 0	55 ·2	56 ·7
1. 23	22. 55	6. 13	·1430	7. 55	·02198	21. 0	56 ·6	58 ·0
2. 11	23. 15	7. 2	·1437	10. 20	·02204	22. 0	56 ·8	58 ·3
3. 49	23. 0	9. 21	·1433	13. 42	·02238	23. 0	57 ·2	58 ·6
4. 14	23. 20	12. 56	·1434	17. 15	·02257			
4. 53	23. 10	16. 38	·1441	19. 54	·02250			
5. 14	23. 30	18. 36	·1442	21. 9	·02255			
5. 38	21. 10	22. 26	·1435	23. 11	·02221			
5. 42	21. 15	23. 28	·1427	23. 59	·02246			
5. 57	20. 20	23. 59	·1427					
6. 11	21. 55							
6. 26	21. 55							
6. 32	21. 30							
7. 6	22. 0							
7. 13	21. 45							
7. 26	21. 55							
9. 0	20. 55							
9. 34	21. 0							
9. 47	20. 50							
10. 2	20. 55							
10. 12	21. 40							
10. 26	20. 50							
10. 44	20. 20							
11. 21	21. 40							
11. 38	21. 20							
11. 51	22. 10							
11. 56	22. 0							
12. 11	22. 40							
12. 36	21. 55							
13. 56	23. 0							
	***							
18. 2	22. 35							
21. 4	21. 45							
21. 51	21. 55							
22. 13	23. 0							
22. 36	23. 0							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 9								
h m	° ′ ″	h m		h m		h m	°	°
22. 44	20. 23. 25							
23. 11	22. 30							
	***							
23. 25	23. 30							
23. 41	23. 15							
23. 55	24. 0							
23. 59	23. 50							
Dec. 10		Dec. 10		Dec. 10		Dec. 10		
0. 0	20. 23. 50	0. 0	·1427	0. 0	·02246	0. 0	57 ·4	58 ·9
1. 17	25. 20	2. 29	·1434	0. 39	·02276	1. 0	57 ·8	59 ·0
1. 41	25. 10	2. 51	·1426	2. 41	·02322	2. 0	57 ·8	59 ·0
1. 53	24. 55	3. 8	·1434	3. 40	·02325	3. 0	57 ·8	59 ·2
2. 49	26. 0	3. 39	·1426	3. 57	·02337	9. 0	56 ·3	57 ·5
3. 11	25. 45	4. 2	·1427	5. 35	·02340	21. 0	52 ·1	53 ·3
3. 18	26. 0	4. 25	·1424	8. 57	·02317	22. 0	52 ·3	53 ·3
3. 28	25. 35	4. 40	·1427	10. 0	·02292	23. 0	52 ·4	53 ·3
3. 56	25. 10	5. 2	·1423	13. 41	.02256			
4. 9	24. 40	7. 56	·1433	15. 14	·02232			
4. 20	24. 35	9. 21	·1436	16. 22	·02220			
4. 39	26. 0	9. 40	·1444	21. 26	·02124			
4. 43	26. 10	10. 4	·1428	23. 59	·02088			
5. 2	24. 30	10. 13	·1430					
5. 14	23. 55	11. 57	·1431					
5. 32	24. 45	12. 23	·1436					
6. 0	24. 40	12. 41	·1432					
6. 18	23. 20	12. 56	·1434					
6. 32	23. 30	13. 8	·1429					
7. 23	22. 20	13. 36	·1429					
7. 46	22. 0	14. 3	·1439					
8. 13	21. 0	14. 24	·1437					
8. 26	21. 5	15. 6	·1441					
8. 42	19. 50	15. 41	·1435					
8. 56	19. 50	17. 29	·1443					
8. 59	20. 15	19. 55	·1442					
9. 10	19. 40	20. 36	·1430					
9. 26	15. 20	21. 57	·1430					
9. 43	16. 45	22. 28	·1422					
9. 49	16. 25	22. 52	·1425					
9. 56	17. 5	23. 59	·1425					
10. 0	16. 15							
10. 17	17. 55							
10. 27	17. 40							
10. 32	18. 0							
10. 43	16. 55							
10. 56	17. 55							
11. 3	17. 55							
11. 14	19. 10							
12. 4	21. 0							
12. 13	22. 15							
12. 26	21. 5							
12. 41	20. 25							
12. 53	20. 50							
13. 13	20. 0							
13. 23	21. 20							
13. 35	21. 55							
13. 43	24. 40							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 10								
h m	° ′ ″	h m		h m		h m	°	°
13. 59	20. 22. 0							
14. 25	21. 20							
14. 29	22. 20							
14. 42	22. 20							
14. 54	20. 45							
14. 58	20. 20							
15. 9	18. 25							
15. 32	20. 25							
15. 50	21. 5							
16. 4	22. 10							
16. 8	21. 45							
16. 21	22. 30							
16. 27	21. 50							
16. 44	21. 40							
16. 56	22. 5							
17. 9	21. 20							
17. 19	22. 5							
17. 27	21. 40							
17. 58	22. 15							
18. 9	22. 45							
18. 14	21. 45							
	* * *							
18. 29	22. 25							
	* * *							
19. 9	22. 5							
19. 13	22. 50							
19. 27	22. 20							
20. 6	22. 55							
20. 13	22. 25							
20. 59	26. 0							
21. 18	25. 45							
21. 28	26. 30							
21. 41	25. 25							
21. 48	25. 25							
22. 6	26. 50							
22. 28	27. 25							
22. 39	27. 10							
23. 6	28. 30							
23. 12	28. 15							
23. 21	28. 25							
23. 42	26. 25							
23. 59	27. 45							
Dec. 11		Dec. 11		Dec. 11		Dec. 11		
0. 0	20. 27. 45	0. 0	·1425	0. 0	·02088	0. 0	52 ·6	53 ·7
0. 20	27. 0	1. 23	·1425	1. 45	·02125	1. 0	54 ·2	55 ·3
0. 37	27. 20	1. 39	·1416	2. 4	·02144	2. 0	54 ·6	55 ·7
0. 50	26. 40	2. 27	·1425	4. 41	·02202	3. 0	55 ·1	55 ·9
1. 14	26. 30	2. 55	·1418	5. 32	·02209	9. 0	55 ·4	56 ·3
1. 21	27. 0	3. 8	·1419	7. 16	·02200	10. 40	55 ·5	56 ·3
1. 43	24. 40	3. 26	·1413	7. 37	·02215	21. 0	56 ·1	57 ·0
1. 56	24. 50	4. 6	·1423	8. 13	·02191	22. 0	56 ·8	57 ·3
2. 10	23. 45	4. 30	·1423	8. 41	·02200	23. 0	56 ·7	57 ·6
2. 33	27. 0	4. 56	·1412	10. 56	·02178			
2. 40	26. 25	5. 36	·1429	11. 36	·02183			
2. 52	27. 5	5. 55	·1424	11. 56	·02172			
2. 58	27. 0	6. 25	·1430	14. 29	·02180			
3. 17	28. 20	7. 9	·1413	15. 14	·02167			

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 11		Dec. 11		Dec. 11				
h m	° ′ ″	h m		h m		h m	°	°
3. 26	20. 26. 40	7. 34	·1453	21. 12	·02182			
3. 54	24. 20	7. 50	·1443	22. 23	·02180			
4. 7	25. 20	8. 11	·1421		(†)			
4. 23	25. 15	8. 41	·1427					
4. 34	24. 0	8. 53	·1422					
4. 54:	20. 10	9. 38	·1429					
4. 59	18. 50	11. 25	·1424					
5. 8	19. 30	11. 41	·1434					
5. 14	19. 5	11. 57	·1428					
5. 36	22. 10	14. 30	·1424					
5. 53	20. 40	14. 55	·1431					
6. 55	23. 55	16. 43	·1431					
7. 0	23. 15	19. 9	·1439					
7. 16	13. 10	19. 43	·1432					
7. 23	9. 5		* * *					
7. 36	14. 25	20. 33	·1431					
7. 55	18. 35	20. 56	·1437					
8. 13	18. 5	21. 26	·1431					
8. 28	20. 5	21. 44	·1433					
8. 42	21. 50	22. 56	·1427					
8. 56	20. 45	23. 10	·1421					
9. 13	21. 10	23. 59	·1429					
10. 36	20. 30							
11. 3	19. 40							
11. 17	19. 50							
11. 36	22. 5							
11. 58	19. 55							
12. 7	20. 15							
12. 20	19. 40							
12. 32	20. 30							
12. 55	21. 10							
13. 8	21. 0							
13. 23	21. 40							
13. 43	20. 25							
14. 11	20. 35							
14. 15:	22. 30							
14. 32	23. 20							
14. 44	25. 30							
15. 25	21. 20							
15. 31	21. 30							
15. 36	21. 5							
	* * *							
16. 56	23. 0							
17. 6	22. 15							
17. 11	22. 40							
17. 24	22. 20							
17. 53	22. 45							
18. 3	22. 10							
18. 53	22. 30							
19. 50	23. 55							
20. 7	23. 30							
20. 21	23. 40							
20. 32	23. 10							
21. 14	23. 5							
21. 33	24. 10							
21. 49	23. 40							
21. 56	23. 55							
22. 25	23. 20							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 11								
h m	° ′ ″	h m		h m		h m	°	°
22. 32	20. 22. 40							
22. 53	23. 25							
23. 10	22. 25							
23. 14	22. 55							
23. 31	22. 30							
23. 59	22. 45							
Dec. 12		Dec. 12		Dec. 12		Dec. 12		
0. 0	20. 22. 45	0. 0	·1429		(†)	0. 0	57·4	58·2
0. 16	22. 50	0. 26	·1436	1. 0	·02247	1. 0	58·0	59·0
0. 25	23. 55	3. 26	·1431	1. 26	·02250	2. 0	58·0	59·0
1. 9	24. 15	4. 6	·1419	2. 57	·02293	3. 0	58·3	59·0
1. 44	23. 0	6. 25	·1435	5. 53	·02323	9. 0	57·9	58·5
1. 51	23. 20	6. 57	·1430	10. 54	·02317	21. 0	57·0	58·0
1. 57	22. 55	8. 14	·1428	11. 35	·02297	22. 0	57·4	58·4
2. 14	23. 40	8. 27	·1432	15. 52	·02276	23. 0	57·8	58·7
2. 23	23. 20	8. 49	·1429	23. 59	·02300			
2. 40	23. 20	9. 22	·1428					
2. 59	24. 10	10. 11	·1422					
3. 8	24. 0	10. 42	·1422					
3. 36	24. 15	11. 13	·1436					
3. 44	25. 20	11. 34	·1430					
3. 58	25. 30	12. 27	·1425					
4. 9	24. 25	13. 26	·1426					
4. 23	24. 5	14. 27	·1432					
4. 33	24. 50	14. 54	·1427					
4. 44	24. 5	15. 38	·1433					
4. 59	24. 35	16. 21	·1428					
5. 9	24. 0	17. 26	·1435					
5. 14	24. 10	17. 57	·1430					
5. 28	23. 25	18. 33	·1434					
5. 36	23. 30	19. 23	·1427					
6. 7	22. 45	21. 28	·1433					
6. 24	22. 55	23. 59	·1431					
6. 50	21. 50							
6. 56	22. 20							
7. 23	21. 25							
7. 39	21. 55							
8. 55	20. 40							
9. 24	20. 40							
9. 36	19. 30							
9. 50	19. 10							
10. 10	17. 55							
10. 32	19. 50							
10. 41	20. 10							
10. 48	19. 40							
10. 59	19. 45							
11. 6	20. 30							
11. 36	17. 30							
11. 43	18. 5							
11. 53	17. 40							
12. 43	20. 20							
12. 51	20. 5							
13. 42	21. 25							
13. 53	22. 35							
14. 20	20. 0							
14. 33	19. 45							
14. 48	20. 50							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 12								
h m	° ′ ″	h m		h m		h m	°	°
14. 56	20. 20. 25							
15. 13	21. 55							
15. 24	21. 50							
15. 32	22. 30							
15. 40	20. 30							
15. 59	21. 50							
16. 18	21. 30							
16. 58	22. 5							
17. 13	21. 0							
17. 53	22. 50							
18. 3	22. 30							
18. 53	22. 30							
19. 43	24. 30							
19. 56	23. 30							
20. 23	23. 15							
20. 32	23. 35							
20. 43	22. 55							
21. 53	23. 30							
22. 23	24. 20							
23. 42	22. 45							
23. 59	23. 55							
Dec. 13		Dec. 13		Dec. 13		Dec. 13		
0. 0	20. 23. 55	0. 0	·1431	0. 0	·02300	0. 0	58·4	59·0
1. 6	24. 30	2. 9	·1423	1. 22	·02318	1. 0	58·9	59·6
1. 34	23. 50	3. 36	·1421	2. 43	·02346	2. 0	58·6	59·2
1. 56	24. 5	3. 57	·1411	5. 0	·02360	3. 0	58·8	59·5
2. 4	23. 30	4. 14	·1409	10. 20	·02327	9. 0	57·5	58·0
2. 33	23. 40	4. 51	·1420	13. 15	·02288	11. 0	57·0	57·2
2. 41	23. 10	4. 57	·1420	18. 43	·02258	12. 0	56·4	56·9
3. 42	23. 30	5. 13	·1423	23. 11	·02207	21. 0	55·0	55·4
4. 9	21. 15	6. 33	·1421	23. 59	·02195	22. 0	54·9	54·4
4. 19	22. 5	6. 57	·1424			23. 0	54·9	55·2
4. 28	22. 5	11. 26	·1424					
4. 44	22. 50	20. 32	·1431					
4. 58	22. 15	22. 32	·1428					
5. 7	21. 55	23. 12	·1431					
5. 15	22. 15	23. 59	·1431					
5. 33	22. 15							
6. 11	23. 0							
6. 33	22. 35							
6. 42	21. 55							
7. 4	21. 30							
7. 23	22. 0							
9. 28	21. 20							
9. 58	21. 45							
10. 36	21. 0							
10. 56	21. 30							
17. 16	22. 10							
19. 1	22. 15							
20. 9	22. 55							
20. 18	22. 30							
22. 26	22. 30							
22. 41	22. 55							
22. 56	22. 10							
22. 59	23. 0							
23. 59	23. 10							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.		Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.								Of H. F. Magnet.	Of V. F. Magnet.
Dec. 14		Dec. 14		Dec. 14		Dec. 14			Dec. 14								
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 23. 10	0. 0	·1431	0. 0	·02195	0. 0	55·0	55·3	22. 6	20. 23. 0							
0. 28	23. 45	0. 32	·1430	1. 14	·02203	1. 0	55·4	55·8	22. 10	22. 45							
0. 59	23. 0	0. 59	·1425	3. 27	·02221	2. 0	55·6	56·1	22. 26	23. 10							
1. 17	23. 20	1. 21	·1427	5. 41	·02255	3. 0	55·7	56·6	22. 32	24. 5							
1. 36	22. 55	5. 27	·1429	7. 41	·02263	9. 0	56·2	56·8	22. 59	23. 40							
2. 26	22. 30	6. 11	·1426	9. 44	·02248	21. 0	53·5	54·0	23. 5	25. 0							
2. 40	23. 0	6. 26	·1422	14. 11	·02196	22. 0	53·9	54·1	23. 12	25. 10							
2. 51	22. 45	6. 56	·1418	18. 7	·02153	23. 0	54·1	54·6	23. 23	23. 55							
4. 6	23. 0	7. 28	·1426	22. 25	·02088				23. 32	25. 50							
4. 23	22. 0	7. 56	·1421	23. 42	·02093				23. 36	26. 0							
4. 41	22. 45	8. 55	·1421		(†)				23. 41	27. 10							
5. 26	21. 55	9. 23	·1426						23. 44	26. 5							
5. 47	22. 25	9. 36	·1423						23. 55	26. 0							
6. 7	22. 25	13. 32	·1422						23. 59	27. 45							
6. 26	20. 45	14. 8	·1429														
6. 39	20. 55	15. 12	·1425						Dec. 15		Dec. 15		Dec. 15		Dec. 15		
6. 51	19. 30	16. 9	·1426						0. 0	20. 27. 45	0. 0	·1433		(†)	0. 0	54·5	55·0
6. 58	19. 25	17. 28	·1433						0. 12	25. 50	0. 18	·1429	0. 55	·02157	1. 0	55·0	55·5
7. 11	17. 40	21. 0	·1437						0. 15	26. 0	0. 35	·1429	5. 32	·02203	2. 30	55·0	55·5
7. 39	21. 10	21. 8	·1445						0. 21	25. 25	0. 54	·1421	10. 25	·02180	3. 0	55·0	55·8
7. 56	20. 55	21. 27	·1439						0. 36	26. 5	1. 4	·1425	19. 15	·02125	9. 0	54·9	55·7
8. 15	21. 55	21. 38	·1442						0. 41	25. 50	1. 14	·1419	23. 59	·02083	21. 45	53·6	54·1
8. 43	21. 20	22. 38	·1428						0. 56	27. 50	1. 54	·1424					
8. 53	21. 45	22. 59	·1428						1. 38	26. 0	2. 0	·1430					
9. 8	21. 5	23. 59	·1433						1. 45	24. 45	2. 13	·1428					
9. 26	21. 5								1. 57	25. 30	2. 32	·1433					
9. 38	20. 20								2. 11	23. 55	2. 53	·1429					
9. 56	21. 5								2. 26	25. 5	3. 10	·1431					
10. 8	20. 40								2. 41	25. 5	3. 14	·1428					
10. 23	20. 40								2. 56	23. 30		***					
10. 28	21. 0								3. 7	24. 10	3. 35	·1431					
10. 39	20. 25								3. 11	22. 0	3. 53	·1424					
10. 47	20. 45								3. 13	24. 5	4. 11	·1429					
12. 21	21. 35								3. 18	23. 0	4. 47	·1421					
12. 33	22. 10								3. 21	23. 50	5. 11	·1423					
12. 41	21. 40								3. 26	23. 50	5. 29	·1414					
13. 6	21. 45								3. 33	22. 55	5. 56	·1422					
13. 20	22. 40								3. 53	24. 10	7. 16	·1427					
13. 36	22. 0								3. 58	23. 50	7. 36	·1422					
13. 47	22. 55								4. 24	26. 45	7. 50	·1425					
14. 4	22. 55								4. 37	26. 40	8. 9	·1425					
14. 32	21. 0								4. 59	25. 20	8. 19	·1421					
15. 8	21. 50								5. 23	22. 5	8. 52	·1424					
15. 27	22. 15								5. 30	21. 50	8. 59	·1421					
15. 56	22. 5								5. 41	20. 55	9. 33	·1426					
16. 9	21. 30								5. 56	20. 0	10. 17	·1423					
16. 22	22. 20								6. 3	20. 10	10. 27	·1426					
16. 26	22. 0								6. 14	19. 50	10. 33	·1423					
16. 31	22. 45								6. 37	21. 20	10. 44	·1426					
16. 54	21. 55								6. 41	21. 20	11. 9	·1420					
19. 42	21. 55								6. 53	22. 45	11. 24	·1423					
20. 33	21. 10								7. 13	22. 15		***					
20. 55	21. 25								7. 23	22. 45	14. 7	·1420					
20. 59	20. 35								7. 38	22. 0	14. 18	·1426					
21. 32	23. 5								7. 46	22. 15	14. 27	·1423					
21. 39	22. 45								7. 56	22. 5	14. 40	·1427					
21. 53	23. 35								7. 59	22. 35	14. 43	·1424					
21. 59	22. 25								8. 37	20. 40	15. 0	·1429					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 15		Dec. 15						
h m	° ′ ″	h m		h m		h m	°	°
8. 55	20. 21. 55	15. 26	·1425					
9. 58	20. 50	15. 41	·1428					
10. 26	21. 30	15. 54	·1425					
10. 34	20. 55	17. 16	·1429					
10. 55	21. 45	17. 26	·1424					
11. 12	20. 30	17. 54	·1431					
11. 21	21. 20	17. 59	·1427					
12. 22	21. 10	18. 30	·1431					
12. 44	20. 0	18. 50	·1435					
13. 26	20. 10	20. 39	·1437					
14. 1	21. 0	20. 48	·1431					
14. 9	20. 50		***					
14. 15	22. 5	21. 4	·1440					
14. 33	21. 40	21. 26	·1440					
14. 44	20. 50	21. 44	·1437					
15. 12	21. 5	23. 59	·1432					
15. 21	20. 25							
15. 52	21. 0							
16. 10	22. 25							
16. 21	22. 0							
16. 26	22. 25							
16. 43	21. 25							
17. 10	22. 0							
17. 23	22. 30							
17. 29	21. 25							
17. 41	21. 55							
17. 52	21. 20							
17. 56	22. 10							
18. 3	21. 40							
	***							
18. 55	20. 45							
19. 4	21. 45							
19. 28	21. 35							
19. 42	22. 10							
19. 53	21. 55							
20. 0	22. 20							
20. 30	21. 45							
20. 40	22. 15							
20. 49	21. 25							
20. 54	21. 0							
20. 58	21. 40							
21. 6	21. 50							
21. 14	21. 15							
21. 23	22. 10							
21. 32	22. 30							
	***							
21. 59	21. 50							
22. 14	22. 45							
22. 33	22. 20							
22. 55	24. 10							
23. 14	23. 35							
23. 55	24. 15							
23. 59	25. 0							
Dec. 16		Dec. 16		Dec. 16		Dec. 16		
0. 0	20. 25. 0	0. 0	·1432	0. 0	·02083	1. 0	53 ·9	54 ·1
	***	0. 23	·1434	0. 47	·02080	8. 30	53 ·2	54 ·0
0. 8	25. 0	0. 35	·1430	2. 11	·02118	21. 0	51 ·7	52 ·3

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 16		Dec. 16		Dec. 16		Dec 16		
h m	° ′ ″	h m		h m		h m	°	°
0. 14	20. 24. 40	1. 23	·1431	2. 54	·02100	22. 0	51 ·7	52 ·4
0. 25	25. 45	1. 59	·1439	3. 13	·02117	23. 0	51 ·7	52 ·4
0. 32	24. 40	2. 50	·1427	3. 53	·02106			
0. 53	26. 40	3. 10	·1437	4. 39	·02145			
1. 0	25. 45	3. 33	·1426	6. 29	·02137			
1. 13	26. 10	3. 52	·1406	8. 6	·02141			
1. 33	25. 20	4. 34	·1426	9. 33	·02125			
1. 49	27. 40	5. 6	·1425		(†)			
1. 58	27. 10	5. 13	·1429	12. 24	·02084			
2. 11	26. 55	5. 27	·1423	12. 45	·02070			
2. 23	27. 30	6. 2	·1427	14. 21	·02044			
2. 48	25. 30	6. 18	·1432	18. 26	·02036			
2. 56	25. 50	6. 33	·1419	23. 59	·02000			
3. 3	25. 15	6. 43	·1427					
3. 19	30. 10	6. 56	·1422					
3. 26	29. 30	7. 6	·1423					
3. 34	30. 5	7. 13	·1416					
4. 6	19. 50	7. 33	·1424					
4. 11	19. 40	7. 49	·1424					
4. 17	18. 0	7. 57	·1431					
4. 27	17. 55	8. 9	·1430					
4. 44	25. 20	8. 16	·1426					
4. 54	25. 15	8. 43	·1427					
5. 6	27. 0	9. 6	·1415					
5. 19	29. 30	9. 32	·1421					
5. 26	28. 5	9. 41	·1417					
	***	9. 46	·1421					
6. 6	24. 15	9. 55	·1417					
6. 9	23. 20	10. 11	·1418					
6. 14	23. 20	10. 42	·1432					
6. 26	25. 10	11. 21	·1403					
6. 39	23. 30	11. 41	·1405					
6. 48	23. 35	12. 32	·1428					
6. 59	21. 40	12. 47	·1417					
7. 9	22. 40	13. 14	·1426					
7. 13	22. 10	13. 25	·1421					
7. 28	18. 0		***					
7. 41	17. 10	14. 8	·1427					
7. 50	18. 10	14. 27	·1419					
7. 56	18. 15	14. 39	·1424					
8. 10	21. 10	15. 26	·1424					
8. 26	21. 40	15. 29	·1418					
8. 33	19. 15	15. 41	·1426					
8. 42	19. 10	16. 29	·1426					
9. 9	14. 50	16. 35	·1421					
9. 14	15. 20	16. 44	·1426					
9. 18	15. 20	16. 56	·1423					
9. 26	16. 50	17. 9	·1428					
9. 43	18. 35	17. 53	·1427					
10. 26	18. 25	18. 8	·1431					
10. 28	17. 20	18. 18	·1429					
10. 41	18. 10	18. 41	·1436					
10. 48	20. 0	18. 56	·1429					
10. 58	20. 40		***					
11. 14	16. 5	19. 32	·1417					
11. 28	17. 5	19. 43	·1425					
11. 41	15. 0	19. 58	·1424					
12. 9	19. 40	20. 6	·1430					
			***					

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ꞉ attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 16		Dec. 16						
h m	° ′ ″	h m		h m		h m	°	°
12. 21	20. 18. 25	20. 41	·1427					
12. 42	21. 25	20. 53	·1422					
12. 54	20. 0	20. 58	·1425					
12. 59	20. 0	21. 7	·1425					
13. 7	18. 45	21. 13	·1431					
13. 14	18. 25		***					
13. 36	22. 10	21. 55	·1419					
13. 41	22. 0	22. 2	·1426					
14. 8	22. 20	22. 20	·1429					
14. 16	21. 5	22. 29	·1424					
14. 32	20. 40	22. 51	·1425					
14. 39	22. 5	23. 2	·1422					
14. 43	21. 0	23. 59	·1432					
14. 53	21. 10							
14. 58	20. 20							
15. 6	20. 30							
15. 19	19. 40							
15. 33	20. 40							
15. 34	20. 15							
15. 43	21. 20							
15. 56	19. 0							
16. 4	19. 0							
16. 17	19. 20							
16. 29	21. 5							
16. 36	22. 15							
16. 43	20. 25							
16. 51	20. 35							
16. 54	21. 55							
16. 58	20. 20							
17. 6	20. 5							
17. 12	21. 40							
17. 16	20. 30							
17. 38	21. 15							
17. 41	20. 55							
17. 53	21. 0							
17. 58	21. 55							
	***							
18. 14	21. 0							
18. 31	22. 40							
18. 37	24. 0							
18. 51	23. 20							
18. 56	22. 0							
19. 0	21. 55							
19. 4	23. 0							
19. 11	22. 20							
19. 23	23. 40							
19. 25	25. 0							
19. 34	23. 50							
19. 49	27. 0							
20. 14	24. 50							
20. 23	23. 5							
20. 25	24. 15							
20. 26	22. 0							
20. 27	25. 5							
20. 30	23. 15							
20. 35	25. 10							
20. 43	25. 30							
20. 51	24. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 16								
h m	° ′ ″	h m		h m		h m		
21. 9	20. 25. 20							
	***							
21. 56	22. 25							
22. 25	25. 0							
22. 28	23. 55							
22. 42	25. 0							
23. 21	23. 0							
23. 39	23. 55							
23. 59	23. 45							
Dec. 17		Dec. 17		Dec. 17		Dec. 17		
0. 0	20. 23. 45	0. 0	·1432	0. 0	·02000	0. 0	52 ·1	52 ·8
0. 24	25. 0	0. 53	·1436	3. 6	·02157	1. 0	52 ·2	53 ·4
0. 39	24. 10	1. 59	·1432	4. 28	·02205	2. 0	52 ·6	53 ·9
0. 53	25. 20	2. 53	·1425	6. 41	·02227	3. 0	53 ·2	54 ·7
0. 57	24. 55	3. 24	·1432	7. 10	·02247	9. 0	54 ·7	56 ·6
1. 18	26. 55	3. 44	·1428	7. 58	·02236	21. 0	55 ·2	56 ·4
1. 26	26. 0	3. 57	·1420	9. 56	·02264	22. 0	55 ·4	57 ·0
1. 39	26. 10	4. 18	·1428	10. 8	·02296	23. 0	55 ·7	57 ·2
1. 50	25. 50	4. 33	·1424	10. 26	·02257			
2. 23	25. 50	4. 48	·1432	11. 24	·02263			
2. 29	24. 40	4. 58	·1429	12. 4	·02258			
2. 38	23. 40	5. 41	·1434	12. 41	·02280			
2. 50	24. 55	5. 56	·1431	13. 26	·02262			
2. 56	23. 40	6. 18	·1431	18. 15	·02283			
3. 6	23. 0	6. 39	·1421	23. 59	·02322			
3. 17	21. 30	7. 19	·1455					
3. 26	21. 30	7. 35	·1453					
3. 34	19. 45	7. 49	·1435					
3. 47	18. 20	7. 56	·1438					
3. 58	15. 30	8. 14	·1427					
4. 8	14. 0	8. 28	·1430					
4. 12	14. 0	8. 48	·1426					
4. 15	16. 55	9. 3	·1433					
4. 19	15. 20	9. 23	·1428					
4. 26	16. 45	9. 36	·1415					
4. 29	16. 10	9. 59	·1419					
4. 51	20. 0	10. 10	·1439					
4. 56	19. 20	10. 18	·1428					
4. 59:	19. 5	10. 32	·1424					
5. 18	21. 20	10. 39	·1430					
5. 26	21. 20	10. 49	·1427					
5. 40	22. 40	11. 10	·1443					
5. 58	23. 0	11. 26	·1433					
6. 28	21. 40	11. 41	·1432					
6. 44	13. 0	11. 59	·1425					
6. 56	6. 45	12. 9	·1416					
7. 8	9. 50	12. 27	·1414					
7. 21	11. 50	12. 51	·1425					
7. 41	19. 10	13. 11	·1426					
7. 52	17. 20	13. 57	·1433					
7. 56	18. 15	14. 21	·1428					
8. 11	18. 25	14. 56	·1426					
8. 27	20. 20	15. 6	·1430					
8. 37	20. 0	15. 27	·1427					
8. 43	20. 25	15. 59	·1430					
9. 8	19. 0	16. 27	·1426					
9. 20	20. 30	16. 59	·1427					

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 17		Dec. 17						
h m	° ′ ″	h m		h m		h m	°	°
9. 32	20. 15. 40	17. 34	·1424					
9. 58	17. 30	18. 13	·1430					
10. 9	29. 5	18. 29	·1425					
10. 30	20. 40	18. 37	·1431					
10. 38	20. 10	18. 49	·1425					
10. 55	14. 20	19. 2	·1431					
10. 59	15. 25	19. 31	·1430					
11. 6	15. 25	20. 18	·1433					
11. 28	19. 10	20. 43	·1429					
11. 56	14. 40	21. 42	·1430					
12. 7	14. 0	23. 19	·1426					
12. 36	18. 5	23. 59	·1426					
12. 51	25. 20							
12. 58	25. 55							
13. 10	24. 55							
13. 22	24. 20							
13. 26	25. 10							
13. 41	24. 0							
13. 56	21. 20							
14. 24	20. 10							
14. 37	20. 50							
14. 50	19. 50							
15. 0	21. 5							
15. 11	19. 25							
15. 42	22. 10							
15. 50	20. 40							
16. 8	19. 10							
16. 15	20. 15							
16. 20	20. 0							
16. 29	22. 0							
16. 33	22. 10							
16. 53	21. 15							
17. 4	21. 35							
17. 26	21. 0							
	***							
18. 37	22. 10							
18. 50	21. 0							
19. 7	22. 5							
19. 28	21. 30							
19. 58	21. 55							
20. 13	21. 20							
20. 22	21. 45							
20. 37	21. 0							
20. 46	22. 5							
20. 56	21. 20							
20. 59	21. 50							
21. 33	22. 35							
21. 43	22. 15							
21. 56	22. 50							
22. 6	22. 30							
22. 20	23. 15							
22. 30	23. 0							
22. 39	23. 40							
22. 41	22. 5							
22. 47	24. 30							
22. 57	25. 50							
23. 19	24. 0							
23. 27	23. 45							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet	Readings of Thermometers. Of V. F. Magnet.
Dec. 17								
h m	° ′ ″	h m		h m		h m	°	°
23. 40	20. 24. 0							
23. 52	23. 40							
23. 59	24. 5							
Dec. 18		Dec. 18		Dec. 18		Dec. 18		
0. 0	20. 24. 5	0. 0	·1426	0. 0	·02322	0. 0	56 ·2	57 ·4
0. 13	23. 5	1. 34	·1432	4. 19	·02386	1. 0	56 ·8	58 ·0
0. 50	23. 40	2. 59	·1429	7. 52	·02400	2. 0	56 ·8	58 ·0
1. 42	23. 15	3. 21	·1433	8. 52	·02362	3. 0	56 ·8	58 ·0
1. 52	22. 30	3. 56	·1416	9. 9	·02377	9. 0	56 ·5	57 ·5
1. 58	23. 30	4. 26	·1430	9. 28	·02358	21. 0	57 ·4	59 ·0
2. 29	23. 25	4. 44	·1426	10. 25	·02360	22. 0	57 ·6	59 ·3
2. 39	23. 40	5. 29	·1430	10. 54	·02377	23. 0	57 ·3	58 ·9
2. 43	23. 0	5. 58	·1424	12. 40	·02398			
2. 58	23. 25	7. 40	·1425	23. 59	·02437			
3. 7	22. 45	7. 56	·1442					
3. 33	23. 0	8. 11	·1435					
3. 58	19. 30	8. 26	·1445					
4. 12	19. 30	8. 39	·1431					
4. 20	18. 55	8. 50	·1426					
4. 39	21. 55	9. 13	·1450					
4. 52	20. 40	9. 33	·1435					
5. 16	21. 50	9. 50	·1438					
5. 28	21. 10	10. 19	·1422					
5. 53	21. 50	10. 27	·1411					
6. 11	20. 35	10. 53	·1425					
6. 32	21. 20	11. 6	·1418					
6. 40	21. 0	11. 27	·1418					
6. 56	21. 50	11. 41	·1411					
7. 3	22. 45	12. 32	·1410					
7. 26	23. 10	12. 43	·1418					
7. 42	19. 55	13. 13	·1413					
7. 58	23. 0	13. 37	·1418					
8. 11	22. 10	15. 10	·1417					
8. 17	23. 10	15. 28	·1421					
8. 26	25. 0	16. 36	·1421					
8. 43	14. 30	17. 32	·1429					
8. 55	15. 5	17. 41	·1426					
9. 0	14. 0	17. 56	·1429					
9. 14	17. 50	18. 14	·1423					
9. 25	16. 30	19. 3	·1421					
9. 39	15. 45	19. 53	·1426					
9. 59	20. 30	20. 56	·1428					
10. 10	21. 10	21. 3	·1424					
10. 15	21. 5	21. 53	·1420					
10. 30	15. 30	22. 11	·1424					
10. 55	19. 25	23. 59	·1419					
11. 12	19. 45							
11. 45	18. 35							
12. 3	19. 25							
12. 13	20. 0							
12. 33	19. 40							
12. 43	21. 55							
12. 53	21. 55							
12. 58	21. 15							
13. 9	22. 15							
13. 17	21. 40							
13. 47	22. 0							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol ; attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 18								
h m	° ′ ″	h m		h m		h m	°	°
13. 56	20. 22. 50							
14. 3	22. 45							
14. 13	22. 10							
14. 41	22. 50							
14. 57	21. 35							
	* * *							
15. 29	22. 20							
15. 44	20. 45							
	* * *							
16. 23	22. 0							
16. 29	21. 45							
16. 39	21. 20							
16. 44	22. 0							
16. 56	21. 20							
17. 12	21. 30							
17. 26	19. 40							
17. 56	21. 25							
18. 57	21. 25							
19. 9	22. 0							
19. 23	21. 40							
20. 2	22. 25							
20. 8	22. 0							
20. 26	23. 0							
20. 41	23. 0							
21. 3	22. 30							
21. 24	22. 30							
21. 34	22. 0							
22. 18	23. 55							
22. 32	25. 25							
22. 42	24. 20							
22. 59	24. 0							
23. 8	24. 20							
23. 11	25. 15							
23. 14	24. 40							
23. 59	24. 40							
Dec. 19		Dec. 19		Dec. 19		Dec. 19		
0. 0	20. 24. 40	0. 0	·1419	0. 0	·02437	0. 0	57·3	58·4
0. 20	24. 40	1. 4	·1422	5. 58	·02434	1. 0	56·8	58·1
0. 41	25. 20	2. 34	·1412	8. 58	·02398	2. 0	55·9	57·8
0. 51	24. 45		* * *	10. 34	·02358	3. 0	56·3	57·8
1. 0	25. 15	2. 41	·1425	11. 55	·02344	9. 0	55·7	56·7
1. 24	23. 55	3. 12	·1423	13. 23	·02336	21. 0	52·8	54·0
1. 53	24. 15	5. 9	·1425	18. 48	·02256	22. 0	53·0	54·3
2. 8	22. 15	5. 27	·1417	22. 22	·02195	23. 0	53·2	54·4
2. 15	22. 55	5. 59	·1423	23. 59	·02205			
2. 22	22. 15	6. 26	·1432					
2. 43	21. 20	6. 43	·1424					
2. 59	23. 35	7. 36	·1425					
3. 32	22. 0	8. 41	·1418					
3. 42	22. 0	9. 25	·1420					
3. 58	21. 20	9. 49	·1417					
4. 14	21. 45	10. 12	·1426					
4. 26	22. 0	10. 36	·1442					
4. 28	22. 30	10. 56	·1434					
4. 42	21. 55	11. 16	·1421					
5. 9	22. 5	11. 38	·1425					
5. 33	16. 50	12. 4	·1417					

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 19		Dec. 19						
h m	° ′ ″	h m		h m		h m	°	°
5. 39	20. 16. 15	12. 13	·1419					
5. 44	13. 40	12. 32	·1416					
5. 53	13. 55	13. 27	·1420					
5. 56	13. 10	15. 18	·1421					
6. 4	13. 20	15. 41	·1424					
6. 23	17. 30	16. 16	·1418					
6. 36	19. 20	16. 42	·1423					
6. 41	19. 20	16. 56	·1420					
7. 3	20. 55	17. 12	·1425					
7. 25	20. 30	19. 19	·1429					
7. 56	22. 5	20. 29	·1428					
8. 56	20. 40	21. 6	·1422					
9. 7	19. 45	22. 20	·1424					
9. 26	21. 10		* * *					
9. 53	21. 0	23. 59	·1428					
10. 9	23. 5							
10. 25	20. 25							
10. 33	20. 50							
10. 43	19. 45							
11. 2	22. 50							
11. 14	21. 25							
11. 30	21. 25							
11. 59	19. 50							
12. 43	22. 30							
12. 57	22. 30							
13. 6	23. 5							
13. 17	22. 30							
13. 26	22. 55							
13. 44	22. 5							
14. 11	22. 5							
14. 23	23. 10							
14. 43	22. 20							
15. 11	22. 30							
15. 45	21. 0							
15. 56	21. 45							
16. 14	21. 45							
16. 27	20. 45							
16. 51	22. 20							
17. 13	21. 10							
17. 49	20. 40							
18. 13	21. 10							
18. 30	20. 30							
19. 16	20. 40							
19. 26	21. 20							
19. 38	20. 55							
19. 42	21. 35							
20. 55	21. 0							
21. 16	21. 40							
21. 25	21. 5							
22. 11	24. 5							
22. 18	23. 0							
22. 32	23. 0							
22. 39	22. 20							
22. 53	23. 10							
23. 10	22. 25							
23. 14	23. 50							
23. 37	23. 0							
23. 59	23. 10							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.
Dec. 20	
h m	° ′ ″
0. 0	20. 23. 10
0. 13	23. 45
0. 26	23. 35
0. 56	25. 0
1. 17	23. 45
2. 12	24. 0
2. 55	22. 45
3. 29	23. 0
3. 43	23. 55
3. 57	23. 50
4. 21	19. 25
5. 3	21. 50
5. 23	21. 50
6. 26	22. 40
6. 36	23. 25
6. 55	23. 5
7. 25	21. 0
7. 29	20. 10
7. 43	19. 15
8. 18	21. 15
8. 26	20. 45
8. 41	22. 5
8. 59	21. 15
9. 11	21. 55
9. 28	20. 45
9. 59	21. 30
10. 17	21. 0
11. 6	21. 10
11. 59	22. 5
12. 18	22. 0
12. 59	22. 30
13. 50	21. 50
14. 44	22. 15
14. 56	21. 50
15. 43	21. 40
16. 6	22. 20
16. 28:	21. 45
16. 49	22. 30
17. 9	22. 25
17. 46:	20. 45
18. 10	21. 10
18. 44	21. 25
	***
20. 57	20. 40
21. 14	21. 50
21. 23	21. 5
21. 48	22. 20
21. 58	22. 20
22. 26	22. 40
22. 30	21. 55
22. 40	23. 0
23. 19	23. 0
23. 59	23. 55
Dec. 21	
0. 0	20. 23. 55
0. 16	23. 0
0. 39	23. 50

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Dec. 20	
h m	
0. 0	·1428
2. 14	·1430
2. 38	·1428
3. 44	·1430
4. 18	·1416
5. 6	·1430
6. 36	·1428
6. 49	·1422
7. 7	·1425
7. 25	·1422
7. 49	·1428
8. 13	·1423
8. 28	·1422
8. 42	·1427
8. 58	·1419
9. 40	·1425
11. 26	·1425
11. 43	·1424
16. 11	·1424
17. 58	·1429
20. 29	·1423
20. 43	·1425
21. 29	·1422
21. 41	·1426
	***
23. 59	·1431
Dec. 21	
0. 0	·1431
3. 40	·1431
8. 52	·1428

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Dec. 20	
h m	
0. 0	·02205
3. 42	·02266
4. 11	·02260
4. 45	·02274
6. 30	·02265
9. 19	·02276
16. 27	·02255
23. 59	·02260
Dec. 21	
0. 0	·02260
5. 42	·02300
9. 10	·02286

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 20		
h m	°	°
0. 0	53 ·9	55 ·0
1. 0	54 ·2	55 ·5
2. 0	54 ·5	55 ·8
3. 0	55 ·1	56 ·1
9. 0	54 ·7	56 ·0
21. 0	54 ·0	55 ·1
22. 0	54 ·4	55 ·5
23. 0	54 ·8	56 ·0
Dec. 21		
0. 0	54 ·9	56 ·4
1. 0	53 ·9	56 ·3
3. 0	53 ·5	56 ·3

Greenwich Mean Solar Time.	Western Declination.
Dec. 21	
h m	° ′ ″
2. 30	20. 22. 50
3. 2	22. 55
3. 13	22. 35
3. 43	21. 50
4. 20	22. 20
5. 0	22. 5
5. 26	23. 0
5. 41	22. 30
5. 48	22. 45
5. 59	22. 10
6. 54	23. 10
7. 23	22. 20
7. 39	22. 20
8. 9	21. 20
8. 23	21. 45
8. 38	21. 10
9. 6	21. 10
9. 10	20. 50
9. 39	16. 10
9. 56	18. 30
10. 12	20. 20
10. 26	20. 20
10. 42	20. 50
11. 8	19. 55
11. 20	21. 10
12. 26	23. 0
13. 6	21. 45
	***
13. 39	22. 50
14. 25	22. 20
14. 41	22. 30
14. 50	23. 10
15. 7	22. 15
15. 26	22. 0
15. 36	21. 30
15. 44	22. 0
16. 9	21. 20
16. 33	21. 30
16. 55	20. 50
17. 27	21. 55
18. 59	20. 20
19. 13	20. 50
20. 4	21. 0
20. 11	20. 40
21. 30	21. 30
21. 36	20. 55
21. 42	21. 55
22. 18	22. 0
22. 41	22. 55
23. 41	23. 15
23. 59	23. 15
Dec. 22	
0. 0	20. 23. 15
0. 11	23. 30
0. 17	23. 10
0. 23	24. 10
0. 36	23. 45

Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.
Dec. 21	
h m	
9. 24	·1422
9. 42	·1431
10. 2	·1424
10. 31	·1425
11. 6	·1418
11. 21	·1425
12. 32	·1428
14. 23	·1425
14. 37	·1429
14. 54	·1426
18. 23	·1428
18. 57	·1430
20. 40	·1432
22. 56	·1428
23. 59	·1428
Dec. 22	
0. 0	·1428
0. 27	·1432
1. 11	·1429
3. 0	·1434
3. 26	·1429

Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.
Dec. 21	
h m	
21. 40	·02176
23. 59	·02207
Dec. 22	
0. 0	·02207
3. 55	·02277
9. 57	·02295
14. 55	·02320
20. 38	·02317

Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 21		
h m	°	°
9. 0	54 ·4	55 ·7
21. 0	53 ·0	54 ·3
22. 30	53 ·4	55 ·0
23. 0	53 ·8	55 ·2
Dec. 22		
0. 0	54 ·5	56 ·0
1. 0	55 ·2	56 ·4
2. 0	54 ·2	56 ·0
3. 0	55 ·1	57 ·0
9. 0	55 ·3	56 ·7

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec.22		Dec.22		Dec.22		Dec.22		
h m	° ′ ″	h m		h m		h m	°	°
0.53	20.23.55	4.48	·1430	23.59	·02325	10. 0	55·5	57·0
1. 8	24.40	5.44	·1428			21. 0	55·7	57·2
1.40	24. 0	7.26	·1430					
1.44	23.15	8.11	·1427					
1.53	23.55	8.39	·1430					
2.54	23.40	11.29	·1423					
2.58	22.50	11.51	·1428					
3.23	23.50	12.17	·1424					
3.29	23.10	16.26	·1429					
4.10	23. 0	23.59	·1428					
4.16	23.30							
5.33	23.10							
5.42	23.20							
5.53	22.55							
6.26	22.50							
7.13	21.10							
8. 9	21.45							
8.13	21.10							
8.40	22.25							
9.12	21.10							
9.46	21.40							
11.37	21.10							
11.53	22. 5							
11.59	21.20							
12.17	22. 5							
12.43	21.30							
13.30	22. 0							
15.40	21.55							
15.53	21.20							
16. 9	22.10							
16.14	21.50							
17.12	21.40							
18.20	22. 5							
20.25	21.30							
22.25	23. 5							
23.59	22.30							
Dec.23		Dec.23		Dec.23		Dec.23		
0. 0	20.22.30	0. 0	·1428	0. 0	·02325	0. 0	55·5	56·9
1. 3	23.30	2.26	·1427	4.45	·02344	8.30	55·8	57·4
1.58	22.55	2.45	·1424	8.22	·02356	21. 0	55·5	57·0
3. 2	23.15	4.13	·1425	17.56	·02337	22. 0	55·5	57·1
3.14	22.30	4.51	·1430	23.59	·02320	23. 0	54·3	57·2
3.46	22.20	5.43	·1427					
3.55	23. 0	6.36	·1432					
4.39	22. 5	7.20	·1429					
5.25	22.40	9.26	·1427					
5.49	21. 0	9.48	·1431					
6.25	21.20	10. 6	·1428					
6.34	21. 0	10.23	·1429					
7.18	21.45	10.47	·1425					
7.26	20.30	11. 6	·1427					
7.36	21.10	16.29	·1431					
8. 0	21. 0	16.48	·1429					
8.25	21.20	20.32	·1428					
8.39	20. 5	22.23	·1422					
9.12	21. 0	23.59	·1424					
9.33	19.10							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec.23								
h m	° ′ ″	h m		h m		h m	°	°
9.53	20.20.25							
12.59	21.50							
13.38	21.30							
13.55	22. 5							
16.32	22.10							
16.41	22.50							
16.53	22. 0							
18.15	22.30							
20.56	21.25							
22.26	22.20							
23.59	23.20							
Dec.24		Dec.24		Dec.24		Dec.24		
0. 0	20.23.20	0. 0	·1424	0. 0	·02320	0. 0	55·0	57·4
1.13	23.45	3.56	·1432	1.38	·02347	1. 0	56·1	57·7
2.39	23.15	6.59	·1433	5.35	·02353	2. 0	56·2	57·3
3.14	22.50	7.59	·1427	10.27	·02317	3. 0	55·5	57·1
3.26	23. 0	8.43	·1430	17. 4	·02307	9. 0	54·9	55·1
3.43	22.30	9. 3	·1428	20.41	·02277	21.15	54·0	55·3
3.56	22.55	10.39	·1423	22.53	·02234			
5. 3	22. 0	10.55	·1426		(†)			
7.13	21.55	11.11	·1423					
7.34	21.15	11.37	·1426					
7.51	21.40	19.32	·1431					
8. 8	18.55	20.25	·1435					
8.14	19. 0	21.11	·1432					
8.24	20. 5	21.23	·1436					
8.28	19.50	23.21	·1433					
8.56	20.50	23.59	·1435					
9.10:	20. 0							
10.11	19.50							
10.25:	19. 5							
10.44	20.10							
11.12	19.50							
18.17	22. 0							
18.42	21.40							
19.38	21.30							
21. 0	20.30							
21.21	20.50							
21.32	22. 0							
22.26	22.55							
22.36	22.30							
23.59	23.55							
Dec.25		Dec.25		Dec.25		Dec.25		
0. 0	20.23.55	0. 0	·1435		(†)	0.35	54·0	55·5
0. 9	23.50	2.26	·1439	0.42	·02217	9.30	55·7	57·0
0.21	24.40	3.25	·1428	2.15	·02240	21. 0	56·6	57·8
0.33	24. 5	3.37	·1435	4.20	·02208	22. 0	55·4	57·8
0.55	24. 5	3.51	·1432	5. 0	·02273	23. 0	55·4	58·2
1.32	25.10	4.10	·1441	5.52	·02303			
1.41	24.55	4.41	·1443	7.45	·02407			
2.23	25.10	4.57	·1434	8.12	·02364			
2.52	24. 5	5. 8	·1439	8.30	·02377			
3.10	24.55	5.18	·1432	9.55	·02328			
3.23	24. 0	5.27	·1438	12.34	·02320			
3.28	23.50	5.54	·1413	18.55	·02344			
3.43	25. 0	6. 3	·1423	23.18	·02357			
					(†)			

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 25		Dec. 25						
h m	° ′ ″	h m		h m		h m	°	°
3. 58	20. 24. 10	6. 20	·1406					
4. 22	24. 45	6. 36	·1408					
4. 30	26. 15	6. 51	·1385					
4. 38	25. 10	7. 18	·1393					
4. 53	27. 45	7. 28	·1380					
4. 57	26. 55	7. 43	·1398					
5. 11	28. 20	8. 9	·1403					
5. 23	28. 45	8. 28	·1376					
5. 36	32. 25	8. 42	·1395					
5. 44	31. 5	9. 7	·1405					
5. 57	26. 10	10. 13	·1413					
6. 19	24. 0	11. 33	·1414					
6. 38	26. 50	12. 9	·1420					
6. 55	19. 5	12. 32	·1414					
7. 6	19. 0	12. 43	·1416					
7. 11	20. 10	12. 58	·1414					
7. 13	19. 55	14. 56	·1416					
7. 21	23. 0	17. 38	·1421					
7. 38	14. 10	20. 20	·1426					
7. 43	15. 10	20. 56	·1420					
	***	21. 26	·1422					
7. 56	13. 10	21. 58	·1418					
8. 9	17. 40	22. 27	·1417					
8. 20	16. 55	22. 48	·1421					
8. 29	11. 10	22. 56	·1418					
8. 46:	18. 30	23. 6	·1420					
9. 4	21. 20	23. 16	·1419					
9. 19	21. 45	23. 59	·1420					
9. 36	20. 55							
9. 59	22. 0							
10. 26	21. 15							
11. 33	22. 30							
11. 55	21. 20							
12. 21	23. 0							
12. 56:	21. 10							
13. 9	21. 45							
13. 18	21. 20							
13. 56	22. 20							
14. 14	22. 15							
14. 36	23. 0							
14. 46	22. 20							
14. 57	22. 45							
	***							
16. 52	22. 25							
16. 57	23. 0							
17. 9	22. 20							
17. 23	22. 50							
19. 26	22. 20							
20. 10	22. 25							
20. 29	21. 55							
	***							
21. 18	22. 55							
21. 36	22. 30							
22. 12	23. 20							
22. 28	24. 35							
22. 38	24. 0							
22. 44	24. 20							
22. 55	24. 15							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 25								
h m	° ′ ″	h m		h m		h m	°	°
23. 6	20. 25. 10							
23. 47	24. 45							
23. 59	26. 5							
Dec. 26		Dec. 26		Dec. 26		Dec. 26		
0. 0	20. 26. 5	0. 0	·1420		(†)	0. 0	56·9	58·6
0. 21	26. 15	1. 32	·1424	0. 53	·02377	1. 0	57·0	58·7
0. 26	25. 40	2. 26	·1417	5. 12	·02437	2. 0	57·2	58·7
0. 29	26. 55	3. 26	·1421	7. 41	·02444	3. 0	57·0	58·6
0. 44	25. 30	3. 38	·1418	11. 13	·02432	9. 0	58·0	58·9
0. 58	25. 0	6. 19	·1424	16. 26	·02425	21. 0	57·3	58·1
1. 35	35. 30	6. 55	·1415	21. 19	·02400	22. 0	55·0	57·6
2. 43	24. 25	7. 9	·1416		(†)			
3. 11	25. 20	7. 36	·1428					
3. 21	24. 55	8. 3	·1421					
3. 33	24. 55	10. 24	·1420					
4. 8:	23. 20	10. 52	·1424					
4. 32	22. 55	11. 7	·1420					
4. 56	23. 20	11. 45	·1419					
5. 16	22. 55	11. 58	·1422					
5. 31	23. 5	12. 17	·1420					
6. 26	22. 30	17. 26	·1426					
6. 34	23. 10	19. 6	·1422					
6. 43	23. 0	20. 19	·1424					
7. 7	16. 5	20. 51	·1418					
7. 26	19. 40	21. 56	·1417					
7. 42	13. 55	23. 59	·1419					
7. 53	15. 0							
7. 56	15. 0							
8. 12	19. 40							
8. 32	22. 40							
8. 42	23. 0							
9. 1	22. 20							
9. 24	22. 40							
9. 38	21. 40							
9. 43	21. 55							
10. 11	20. 55							
10. 29	21. 0							
11. 0	21. 40							
11. 25	21. 0							
11. 44	21. 45							
13. 32	22. 50							
14. 11	22. 15							
14. 17	22. 30							
15. 42	22. 30							
15. 51	23. 10							
16. 25	22. 20							
16. 34	22. 40							
17. 19	22. 15							
19. 52	23. 0							
20. 56	21. 55							
21. 59	23. 0							
22. 13	22. 40							
22. 43	23. 20							
23. 9	24. 30							
23. 59	24. 30							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 27		Dec. 27		Dec. 27		Dec. 27		
h m	° ′ ″	h m		h m		h m	°	°
0. 0	20. 24. 30	0. 0	·1419		(†)	0. 0	55·9	56·8
0. 55	25. 35		(†)	1. 0	·02339*	1. 0	54·0	56·5
1. 13	25. 10	2. 36	·1416	3. 0	·02347*	3. 0	55·2	56·9
1. 29	25. 45	3. 8	·1411	4. 30	·02383	9. 0	57·0	58·3
1. 58	24. 30	5. 41	·1426	9. 36	·02416	21. 0	57·2	58·7
2. 10	24. 40	6. 35	·1423	10. 55	·02400	22. 0	55·9	57·8
2. 56	22. 20	7. 38	·1421	13. 26	·02397	23. 0	55·0	57·4
3. 24	25. 10	7. 49	·1424	13. 58	·02403			
3. 38	24. 5	8. 8	·1416	15. 4	·02387			
3. 53	24. 40	9. 11	·1426	15. 54	·02403			
4. 32	24. 0	10. 56	·1421	23. 33	·02366			
4. 41	23. 10	11. 23	·1423	23. 44	·02368			
4. 58	22. 55	11. 43	·1419		(†)			
5. 11	23. 5	11. 56	·1424					
5. 44	22. 15	12. 8	·1419					
7. 21	22. 10	12. 20	·1424					
7. 53	20. 45	12. 32	·1420					
8. 12	16. 10	12. 45	·1428					
8. 19	16. 5	12. 59	·1421					
8. 27	16. 40	13. 8	·1430					
8. 55	20. 20	13. 17	·1432					
9. 3	19. 50	13. 39	·1417					
9. 37	21. 40	14. 0	·1418					
11. 35	21. 40	14. 20	·1417					
12. 11	20. 15	14. 50	·1430					
12. 21	20. 15	15. 11	·1424					
12. 33	19. 50	15. 51	·1423					
12. 44	20. 55	17. 26	·1428					
12. 56	20. 0	17. 56	·1433					
13. 6	19. 45	18. 28	·1429					
13. 33	16. 55	18. 56	·1428					
13. 55	20. 55	19. 13	·1423					
14. 6	20. 30	19. 43	·1429					
14. 28	22. 20	20. 11	·1423					
14. 38	22. 10	20. 25	·1427					
15. 13	18. 0	20. 34	·1422					
15. 53	19. 5	21. 6	·1421					
16. 10	20. 20	21. 25	·1425					
16. 42	20. 35	21. 28	·1413					
16. 53	21. 10	21. 40	·1407					
17. 4	20. 35	22. 23	·1416					
17. 26	22. 0	23. 18	·1418					
17. 33	21. 20	23. 37	·1411					
17. 51	22. 50	23. 59	·1414					
18. 9	22. 0							
18. 16	22. 50							
18. 36	22. 0							
18. 53	23. 10							
20. 28	25. 40							
20. 49	27. 0							
20. 58	26. 25							
21. 6	25. 0							
21. 25	24. 40							
21. 28	23. 40							
22. 4	23. 0							
22. 25	25. 30							
22. 39	24. 10							
22. 42	25. 5							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 27								
h m	° ′ ″	h m		h m		h m	°	°
22. 53	20. 23. 45							
23. 0	25. 20							
23. 6	26. 5							
23. 12	24. 15							
23. 23	26. 0							
23. 30	26. 20							
23. 36	25. 40							
23. 52	26. 0							
23. 59	25. 10							
Dec. 28		Dec. 28		Dec. 28		Dec. 28		
0. 0	20. 25. 10	0. 0	·1414		(†)	0. 0	55·7	57·0
0. 13	25. 45	0. 43	·1416	0. 26	·02356	1. 0	56·7	58·3
0. 23	25. 0	1. 7	·1417	3. 56	·02405	2. 0	56·7	58·3
0. 33	24. 50	1. 28	·1411	4. 25	·02424	3. 0	56·2	58·0
0. 59	27. 0		***	10. 29	·02402	9. 0	56·8	58·4
1. 37	25. 5	2. 57	·1419	11. 20	·02372	21. 0	55·9	56·9
2. 7	26. 0	3. 25	·1415	12. 58	·02378	22. 0	55·3	55·8
2. 26	25. 0	3. 39	·1418	16. 20	·02360	23. 0	55·9	56·0
2. 42	24. 45	3. 56	·1402	21. 42	·02337			
3. 0	25. 20	4. 7	·1408	23. 59	·02278			
3. 13	24. 50	4. 18	·1408					
3. 17	25. 10	4. 39	·1419					
3. 26	24. 20	4. 58	·1419					
3. 39	24. 45	5. 59	·1424					
3. 57	20. 0	7. 3	·1421					
4. 4	20. 15	9. 19	·1423					
4. 15	19. 20	10. 10	·1416					
4. 44	22. 40	10. 28	·1420					
5. 27	22. 55	10. 48	·1445					
6. 13	22. 10	11. 4	·1439					
6. 56	22. 10	11. 23	·1423					
7. 14	21. 40	11. 28	·1426					
7. 56	22. 0	11. 41	·1417					
8. 11	21. 45	12. 14	·1413					
8. 21	22. 0	12. 53	·1419					
8. 28	21. 5	15. 56	·1419					
8. 41	21. 0	16. 28	·1426					
8. 57	21. 20	18. 4	·1431					
9. 28	20. 50	19. 6	·1427					
9. 36	21. 25	19. 55	·1429					
9. 55	20. 30	21. 25	·1421					
10. 0	20. 35		***					
10. 26	21. 20	23. 0	·1426					
10. 34	18. 35	23. 23	·1423					
10. 40	17. 40	23. 59	·1423					
10. 57	19. 40							
11. 9	18. 5							
11. 13	16. 30							
11. 23	17. 20							
11. 31	17. 20							
11. 43	18. 55							
11. 56	18. 20							
11. 59	20. 50							
	***							
12. 38	21. 15							
12. 55	20. 10							
13. 11	20. 50							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 28								
h m	° ′ ″	h m		h m		h m	°	°
13. 21	20. 20. 25							
13. 58	21. 15							
14. 13	20. 50							
14. 24	21. 30							
14. 51	21. 40							
15. 21	25. 20							
16. 6	21. 20							
16. 21	22. 20							
16. 51	22. 50							
16. 58	22. 30							
17. 12	23. 0							
17. 42	22. 20							
17. 53	22. 55							
17. 59	22. 25							
18. 35	22. 55							
19. 9	23. 30							
19. 19	23. 10							
19. 52	23. 0							
20. 38	23. 20							
20. 53	24. 0							
20. 59	23. 25							
21. 25	25. 20							
21. 43	24. 25							
21. 58	25. 20							
22. 10	24. 30							
22. 39	25. 50							
23. 59	25. 40							
Dec. 29		Dec. 29		Dec. 29		Dec. 29		
0. 0	20. 25. 40	0. 0	·1423	0. 0	·02278	0. 0	56 ·8	57 ·0
0. 18	25. 0	1. 44	·1424	1. 39	·02340	1. 0	56 ·8	57 ·2
0. 35	25. 20	2. 18	·1419	3. 14	·02343	2. 0	56 ·4	57 ·0
0. 56	24. 10	3. 5	·1426	6. 26	·02395	3. 0	56 ·1	57 ·2
1. 26	23. 40	3. 25	·1423	10. 20	·02420	9. 0	57 ·8	59 ·0
2. 3	23. 10	3. 48	·1428	21. 18	·02297	21. 0	54 ·9	55 ·4
2. 12	22. 15	4. 41	·1420	23. 59	·02245			
2. 56	21. 30	6. 29	·1426					
3. 20	23. 0	11. 54	·1417					
3. 49	23. 0	12. 23	·1423					
4. 16	23. 50	12. 56	·1418					
4. 24	23. 20	13. 8	·1424					
4. 36	23. 40	14. 14	·1417					
4. 48	23. 0	15. 21	·1420					
5. 7	23. 50	18. 28	·1432					
5. 29	23. 0	20. 57	·1427					
5. 43	23. 10	23. 59	·1427					
5. 56	22. 45							
6. 14	23. 5							
9. 58	21. 30							
10. 24	22. 0							
10. 39	20. 30							
11. 6	21. 30							
11. 44	21. 5							
12. 2	23. 0							
12. 53	21. 20							
13. 6	20. 5							
13. 20	21. 25							
13. 43	20. 30							

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers.	
							Of H. F. Magnet.	Of V. F. Magnet.
Dec. 29								
h m	° ′ ″	h m		h m		h m	°	°
13. 53	20. 20. 30							
13. 57	21. 10							
14. 15	21. 5							
14. 35	20. 25							
15. 26	20. 25							
15. 44	21. 15							
16. 33	21. 5							
17. 41	23. 10							
18. 6	23. 10							
20. 3	21. 5							
20. 49	21. 0							
21. 26	22. 5							
22. 0	22. 0							
23. 38	24. 5							
23. 59	24. 0							
Dec. 30		Dec. 30		Dec. 30		Dec. 30		
0. 0	20. 24. 0	0. 0	·1427	0. 0	·02245	1. 0	54 ·0	55 ·0
0. 15	24. 0	1. 28	·1428	2. 44	·02223	8. 30	54 ·0	54 ·6
0. 35	24. 35	2. 13	·1421	5. 11	·02228	21. 0	51 ·2	52 ·1
	***	4. 10	·1420	9. 0	·02197	22. 0	52 ·3	53 ·4
1. 20	24. 25	5. 3	·1427	11. 58	·02182	23. 0	52 ·3	53 ·3
1. 43	23. 30	6. 9	·1424	19. 41	·02097			
3. 36	22. 30	8. 39	·1429	22. 32	·02070			
3. 51	22. 50	11. 44	·1423	23. 59	·02076			
3. 58	21. 20	12. 21	·1433					
4. 8	21. 20	12. 50	·1423					
4. 17	19. 45	13. 11	·1422					
4. 38	20. 20	13. 37	·1425					
4. 56	21. 55	15. 28	·1426					
5. 6	21. 55	18. 5	·1432					
5. 26	22. 15	19. 3	·1428					
6. 17	22. 5	20. 11	·1433					
6. 39	22. 30	21. 6	·1425					
10. 59	20. 55	21. 21	·1423					
11. 12	20. 15	21. 33	·1427					
11. 41	21. 0	21. 59	·1422					
11. 57 :	19. 0	22. 15	·1429					
12. 26	20. 15	23. 59	·1430					
12. 39	19. 50							
13. 8	21. 20							
13. 21	21. 30							
13. 26	22. 20							
13. 56	21. 5							
14. 35	21. 0							
15. 55	21. 20							
16. 18	20. 45							
18. 37	21. 55							
19. 5	21. 50							
19. 16	22. 50							
19. 36	23. 0							
20. 32	21. 50							
20. 41	21. 5							
20. 54	21. 30							
21. 6	20. 50							
21. 16	20. 50							
21. 29	21. 20							
21. 53	21. 10							

The indications are taken from the sheets of the Photographic Record, except where an asterisk is attached to the number, in which instances they are inferred from observations made with the telescope in the ancient manner. The Symbol *** denotes that the magnet has been generally in a state of agitation. The Symbol (†) denotes that the register has failed between the preceding and following readings. The Symbol : attached to a time denotes that the reading will apply equally well to a considerable range of time near that which is recorded. A brace denotes that at this time the curve of the Vertical Force was dislocated, and the difference of the numbers included by the brace shows the amount of the displacement.

Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.	Greenwich Mean Solar Time.	Western Declination.	Greenwich Mean Solar Time.	Horizontal Force in parts of the whole H. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Vertical Force in parts of the whole V. F. uncorrected for Temperature.	Greenwich Mean Solar Time.	Readings of Thermometers. Of H. F. Magnet.	Readings of Thermometers. Of V. F. Magnet.
Dec. 30									Dec. 31		Dec. 31						
h m	° ′ ″	h m		h m		h m	°	°	h m	° ′ ″	h m		h m		h m	°	°
22. 0	20. 20. 25								6. 58	20. 16. 55	20. 38	·1429					
22. 16	23. 25								7. 9	15. 0	22. 26	·1427					
23. 23	22. 0								7. 19	12. 10	22. 43	·1429					
23. 59	22. 55								7. 37	17. 5	23. 59	·1430					
									7. 41	17. 5							
Dec. 31		Dec. 31				Dec. 31			7. 56	19. 20							
0. 0	20. 22. 55	0. 0	·1430			0. 0	52·6	53·6	8. 3	19. 30							
0. 15	23. 35	2. 5	·1430			1. 0	53·2	54·0	8. 26	21. 50							
0. 40	23. 35	2. 33	·1427			2. 0	53·0	54·0	8. 39	20. 45							
0. 55	25. 0	3. 39	·1429			3. 0	53·2	54·2	9. 10	20. 0							
1. 19	24. 0	3. 56	·1426			4. 0	53·0	54·0	11. 11	21. 30							
1. 28	25. 10	5. 12	·1428			9. 0	53·0	54·0	12. 59	21. 0							
1. 52	24. 5	5. 49	·1425			21. 0	52·1	53·2	13. 21	21. 10							
2. 2	24. 40	6. 28	·1428			22. 0	51·8	52·8	13. 44	23. 10							
2. 9	24. 5	6. 43	·1414			23. 0	51·8	52·8	14. 36	20. 20							
2. 29	24. 5	7. 17	·1429						15. 27	21. 40							
	***	7. 29	·1421						16. 30	21. 30							
3. 18	22. 25	7. 43	·1422						18. 29	22. 0							
3. 59	23. 0	8. 6	·1429						18. 44	21. 45							
4. 26	22. 10	8. 22	·1424						20. 29	21. 45							
4. 39	22. 45	9. 14	·1425						21. 12	22. 0							
5. 8	22. 5	12. 56	·1429						21. 53	23. 25							
5. 39	22. 45	13. 32	·1436						22. 29	23. 35							
6. 6	21. 30	14. 18	·1429						22. 32	25. 25							
6. 38	22. 40	18. 36	·1432						23. 59	25. 30							

For the Horizontal and Vertical Forces, increasing readings denote increasing forces.

December 31. The Vertical Force Magnet was removed from the agate planes, and its time of vibration in the horizontal plane was redetermined.

TABLE showing the APPROXIMATE MEAN MONTHLY DECLINATION, at the ROYAL OBSERVATORY, GREENWICH, in the Year 1866.

MONTH.	1866.
	° ′ ″
January	20. 33. 7
February	32. 56
March	31. 44
April	32. 13
May	30. 35
June	28. 47
July	26. 16
August	25. 13
September	23. 39
October	23. 38
November	22. 56
December	22. 22
Mean	20. 27. 47

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

OBSERVATIONS

OF THE

MAGNETIC DIP.

1866.

MAGNETIC DIP, observed at the ROYAL OBSERVATORY, GREENWICH, in the Year 1866.

Day and Approximate Hour, 1866.	Needle.	Length of Needle.	Magnetic Dip.	Observer.
d h			° ′ ″	
January 4. 2	C 2	6 inches	68. 1. 48	N
4. 2	D 2	3 ,,	68. 5. 6	N
19. 0	B 1	9 ,,	68. 0. 20	N
19. 1	B 2	9 ,,	68. 0. 51	N
25. 2	D 1	3 ,,	68. 5. 34	N
29. 0	C 1	6 ,,	68. 2. 18	N
29. 1	C 2	6 ,,	68. 5. 55	N
29. 2	D 1	3 ,,	68. 3. 46	N
February 8. 1	C 1	6 ,,	68. 3. 44	N
8. 2	C 2	6 ,,	68. 4. 24	N
19. 1	D 1	3 ,,	68. 2. 39	N
24. 2	D 2	3 ,,	68. 7. 1	N
27. 22	B 1	9 ,,	68. 1. 20	N
27. 23	B 2	9 ,,	68. 2. 3	N
28. 2	D 2	3 ,,	68. 1. 21	N
March 7. 0	C 1	6 ,,	68. 3. 3	N
7. 1	B 1	9 ,,	68. 5. 36	N
15. 2	D 1	3 ,,	68. 2. 14	N
22. 0	D 2	3 ,,	68. 5. 24	N
22. 2	C 1	6 ,,	68. 1. 58	N
22. 23	D 1	3 ,,	68. 3. 17	N
23. 0	D 2	3 ,,	68. 0. 26	N
23. 1	D 3	3 ,,	68. 7. 14	N
28. 23	C 2	6 ,,	68. 2. 55	N
29. 2	B 2	9 ,,	68. 0. 41	N
29. 2	D 2	3 ,,	68. 5. 50	N
April 10. 1	B 1	9 ,,	67. 59. 24	N
10. 2	D 1	3 ,,	68. 3. 6	N
14. 2	D 2	3 ,,	67. 55. 50	N
18. 2	B 2	9 ,,	68. 1. 32	N
19. 2	D 1	3 ,,	68. 0. 56	N
24. 2	D 2	3 ,,	68. 1. 8	N
24. 23	C 1	6 ,,	68. 0. 51	N
25. 0	C 2	6 ,,	67. 57. 1	N
25. 1	B 1	9 ,,	68. 1. 32	N
May 9. 1	D 1	3 ,,	68. 2. 24	N
9. 2	D 2	3 ,,	67. 56. 19	N
16. 2	C 2	6 ,,	68. 3. 32	N
16. 23	C 1	6 ,,	67. 59. 43	N
17. 0	C 2	6 ,,	67. 59. 53	N
17. 1	B 1	9 ,,	67. 58. 25	N
17. 2	B 2	9 ,,	67. 58. 42	N
19. 1	D 1	3 ,,	68. 2. 46	N
19. 2	D 2	3 ,,	68. 2. 12	N
21. 2	C 1	6 ,,	68. 4. 36	N
29. 23	D 1	3 ,,	67. 59. 14	N
June 7. 23	D 2	3 ,,	68. 2. 49	N
14. 2	D 1	3 ,,	68. 2. 34	N
14. 22	C 1	6 ,,	67. 58. 47	N
14. 23	C 2	6 ,,	68. 0. 17	N
15. 0	C 3	6 ,,	68. 2. 2	N
15. 0	D 3	3 ,,	67. 53. 0	N
15. 1	D 2	3 ,,	67. 57. 32	N
June 15. 2	D 1	3 inches	68. 0. 45	N
22. 2	B 1	9 ,,	67. 59. 17	N
July 2. 18	B 1	9 ,,	67. 58. 23	N
2. 19	D 1	3 ,,	68. 0. 42	N
9. 22	C 2	6 ,,	68. 1. 20	A H
11. 22	B 1	9 ,,	68. 0. 18	N
11. 23	B 2	9 ,,	67. 57. 50	N
12. 0	C 1	6 ,,	68. 2. 22	N
20. 2	C 2	6 ,,	67. 59. 38	N
25. 2	D 2	3 ,,	68. 0. 4	N
28. 0	D 1	3 ,,	68. 0. 21	N
August 7. 0	C 1	6 ,,	68. 2. 3	N
7. 2	C 2	6 ,,	68. 4. 40	N
14. 2	D 1	3 ,,	68. 3. 36	N
15. 1	D 1	3 ,,	68. 1. 48	N
15. 2	D 2	3 ,,	68. 3. 11	N
23. 2	C 1	6 ,,	67. 59. 46	N
27. 23	B 1	9 ,,	67. 59. 27	N
28. 2	B 2	9 ,,	67. 59. 46	N
31. 1	D 2	3 ,,	67. 59. 25	N
31. 2	C 2	6 ,,	68. 0. 13	N
September 6. 3	D 1	3 ,,	68. 1. 24	N
11. 2	D 2	3 ,,	68. 1. 53	N
14. 1	D 1	3 ,,	68. 1. 49	N
14. 2	D 2	3 ,,	68. 1. 39	N
19. 2	C 1	6 ,,	67. 58. 29	N
27. 2	B 1	9 ,,	67. 59. 53	N
28. 1	B 2	9 ,,	68. 1. 23	N
28. 2	C 2	6 ,,	68. 1. 48	N
October 8. 2	D 1	3 ,,	68. 1. 18	N
13. 3	B 1	9 ,,	67. 59. 58	N
13. 4	C 1	6 ,,	68. 0. 28	N
24. 3	D 2	3 ,,	67. 58. 58	N
30. 22	B 2	9 ,,	68. 2. 35	N
30. 23	B 1	9 ,,	68. 2. 15	N
31. 3	C 2	6 ,,	68. 2. 43	N
November 6. 2	C 1	6 ,,	68. 2. 27	N
9. 0	C 2	6 ,,	68. 1. 52	N
9. 1	D 1	3 ,,	68. 1. 25	N
24. 3	D 2	3 ,,	68. 1. 16	N
26. 22	B 1	9 ,,	67. 56. 25	N
26. 23	C 1	6 ,,	67. 58. 34	N
29. 2	C 2	6 ,,	68. 4. 53	N
29. 22	C 2	6 ,,	68. 5. 13	N
29. 23	B 2	9 ,,	68. 1. 19	N
30. 3	B 1	9 ,,	68. 0. 48	N
December 7. 2	D 1	3 ,,	68. 3. 52	N
13. 22	D 1	3 ,,	68. 0. 59	N
13. 23	D 2	3 ,,	67. 59. 52	N
19. 0	C 1	6 ,,	67. 58. 22	N
19. 1	C 2	6 ,,	68. 3. 15	N

The initials N and A H are those of Mr. W. C. Nash and Mr. A. Harding respectively.

MONTHLY MEANS of MAGNETIC DIPS at the ROYAL OBSERVATORY, GREENWICH, in the Year 1866.

Month, 1866.	B 1, 9-inch Needle.	Number of Observations.	B 2, 9-inch Needle.	Number of Observations.	C 1, 6-inch Needle.	Number of Observations.	C 2, 6-inch Needle.	Number of Observations.
	° ′ ″		° ′ ″		° ′ ″		° ′ ″	
January	68. 0. 20	1	68. 0. 51	1	68. 2. 18	1	68. 3. 52	2
February	68. 1. 20	1	68. 2. 3	1	68. 3. 44	1	68. 4. 24	1
March	68. 5. 36	1	68. 0. 41	1	68. 2. 30	2	68. 2. 55	1
April	68. 0. 28	2	68. 1. 32	1	68. 0. 51	1	67. 57. 1	1
May	67. 58. 25	1	67. 58. 42	1	68. 2. 10	2	68. 1. 43	2
June	67. 59. 17	1	....	..	67. 58. 47	1	68. 0. 17	1
July	67. 59. 20	2	67. 57. 50	1	68. 2. 22	1	68. 0. 29	2
August	67. 59. 27	1	67. 59. 46	1	68. 0. 55	2	68. 2. 26	2
September	67. 59. 53	1	68. 1. 23	1	67. 58. 29	1	68. 1. 48	1
October	68. 1. 6	2	68. 2. 35	1	68. 0. 28	1	68. 2. 43	1
November	67. 58. 37	2	68. 1. 19	1	68. 0. 30	2	68. 3. 59	3
December	....	..	....	..	67. 58. 22	1	68. 3. 15	1
Means	(68. 0. 10)	Sum 15	(68. 0. 30)	Sum 10	68. 1. 6	Sum 16	68. 2. 18	Sum 18

Month, 1866.	C 3, 6-inch Needle, loaded.	Number of Observations.	D 1, 3-inch Needle.	Number of Observations.	D 2, 3-inch Needle.	Number of Observations.	D 3, 3-inch Needle, loaded.	Number of Observations.
	° ′ ″		° ′ ″		° ′ ″		° ′ ″	
January	....	..	68. 4. 40	2	68. 5. 6	1	....	..
February	....	..	68. 2. 39	1	68. 4. 11	2	....	..
March	....	..	68. 2. 46	2	68. 3. 53	3	68. 7. 14	1
April	....	..	68. 2. 1	2	67. 58. 29	2	....	..
May	....	..	68. 1. 28	3	67. 59. 16	2	....	..
June	68. 2. 2	1	68. 1. 40	2	68. 0. 10	2	67. 53. 0	1
July	....	..	68. 0. 32	2	68. 0. 4	1	....	..
August	....	..	68. 2. 42	2	68. 1. 18	2	....	..
September	....	..	68. 1. 36	2	68. 1. 46	2	....	..
October	....	..	68. 1. 18	1	67. 58. 58	1	....	..
November	....	..	68. 1. 25	1	68. 1. 16	1	....	..
December	....	..	68. 2. 25	2	67. 59. 52	1	....	..
Means	....	..	68. 2. 7	Sum 22	68. 1. 22	Sum 20	....	..

For this table the monthly means have been formed without reference to the hour at which the observation was made on each day, as in preceding years no certain difference was found between observations taken at 21^h and at 3^h.

In combining the monthly results, to form the annual means, weights have been given proportional to the number of observations.

The means in brackets have been found by applying to the mean of the observed results a correction deduced by taking the difference between the mean result for the same months and that of the whole year, as given by the Needles which were observed throughout the year.

YEARLY MEANS of MAGNETIC DIPS for each of the NEEDLES, and GENERAL MEAN for the Year 1866.

Lengths of the several Sets of Needles.	Needles.	Number of Observations with each Needle.	Mean Yearly Dip from Observations with each Needle.	Mean Yearly Dip from each Set of Needles.	Mean Yearly Dip from all the Sets of Needles.
			° ′ ″	° ′ ″	° ′ ″
9-inch Needles	B 1	15	68. 0. 10	68. 0. 20	68. 1. 16
	B 2	10	68. 0. 30		
6-inch Needles	C 1	16	68. 1. 6	68. 1. 42	
	C 2	18	68. 2. 18		
3-inch Needles	D 1	22	68. 2. 7	68. 1. 45	
	D 2	20	68. 1. 22		

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS

OF

DEFLEXION OF A MAGNET

FOR

ABSOLUTE MEASURE

OF

HORIZONTAL FORCE.

1866.

ABSTRACT of the OBSERVATIONS of DEFLEXION of a MAGNET for ABSOLUTE MEASURE of HORIZONTAL FORCE, made with the KEW UNIFILAR INSTRUMENT.

Month and Day, 1866.		Distances of Centers of Magnets.	Temperature.	Observed Deflexion.	Mean of the Times of Vibration of Deflecting Magnet.	Number of Vibrations.	Temperature.	Observer.
		ft.	°	° ′ ″	s		°	
January	26	1·0 1·3	46·0	12. 42. 26 5. 45. 7	5·295 5·305	100 100	51·6 49·4	N
February	9	1·0 1·3	50·7	12. 43. 25 5. 45. 16	5·315 5·314	100 100	51·4 53·9	N
February	28	1·0 1·3	38·0	12. 44. 29 5. 46. 0	5·312 5·285	100 100	39·5 40·5	N
March	13	1·0 1·3	42·3	12. 42. 50 5. 45. 24	5·288 5·285	100 100	43·8 45·8	N
March	29	1·0 1·3	58·3	12. 39. 54 5. 44. 12	5·320 5·318	100 100	64·0 62·6	N
April	19	1·0 1·3	62·5	12. 39. 25 5. 43. 59	5·321 5·316	100 100	64·8 66·6	N
May	18	1·0 1·3	67·6	12. 37. 26 5. 43. 14	5·312 5·322	100 100	71·8 72·5	N
May	29	1·0 1·3	64·5	12. 37. 41 5. 43. 0	5·319 5·315	100 100	67·8 65·8	N
June	8	1·0 1·3	74·9	12. 34. 52 5. 41. 42	5·302 5·306	100 100	78·7 79·4	N
July	13	1·0 1·3	81·2	12. 35. 36 5. 42. 14	5·319 5·317	100 100	85·7 87·2	N
July	25	1·0 1·3	63·5	12. 35. 33 5. 42. 10	5·300 5·299	100 100	66·2 68·2	N
August	17	1·0 1·3	60·0	12. 37. 49 5. 43. 18	5·318 5·314	100 100	62·6 62·8	N
August	31	1·0 1·3	66·7	12. 34. 21 5. 41. 29	5·315 5·319	100 100	68·7 69·3	N
September	21	1·0 1·3	62·4	12. 32. 16 5. 40. 52	5·330 5·326	100 100	65·1 63·0	N
October	31	1·0 1·3	51·6	12. 33. 3 5. 40. 54	5·327 5·333	100 100	54·9 58·3	N
November	30	1·0 1·3	47·5	12. 34. 55 5. 41. 45	5·328 5·323	100 100	52·0 51·9	N
December	18	1·0 1·3	51·4	12. 31. 58 5. 40. 44	5·326 5·325	100 100	52·6 51·8	N

The position of the Deflecting Magnet with regard to the suspended Magnet is always that which was formerly termed "Lateral." The Deflecting Magnet is placed on the East side of the suspended Magnet, with its marked pole alternately E. and W., and it is placed on the West side with its pole alternately E. and W.; and the deflexion in the table above is the mean of the four deflexions observed in those positions of the magnets.

The lengths of 1 foot and 1·3 foot answer to 304·8 and 396·2 millimètres respectively.

The initial N is that of Mr. W. C. Nash.

In the following calculations, every observation is reduced to the temperature 35°.

COMPUTATION of the VALUES of ABSOLUTE MEASURE of HORIZONTAL FORCE, from OBSERVATIONS with the KEW UNIFILAR INSTRUMENT.

Month and Day, 1866.		In English Measure.									Value of X in French Measure.
		Apparent Value of A^1.	Apparent Value of A^2.	Apparent Value of P.	Mean Value of P.	Log. A corrected by the Application of Mean Value of P. = Log. $\frac{m}{X}$	Adopted Time of Vibration of Deflecting Magnet.	Log. m X.	Value of X.	Value of m.	
January	26	+0·11017	0·11027	−0·00223	−0·00291	9·04327	5·3000	0·21195	3·840	0·4242	1·771
February	9	+0·11040	0·11041	−0·00022		9·04399	5·3145	0·20974	3·827	0·4235	1·765
	28	+0·11032	0·11041	−0·00200		9·04383	5·2985	0·21154	3·836	0·4243	1·769
March	13	+0·11016	0·11029	−0·00289		9·04330	5·2865	0·21380	3·848	0·4252	1·774
	29	+0·11004	0·11021	−0·00379		9·04289	5·3190	0·20969	3·832	0·4230	1·767
April	19	+0·11006	0·11022	−0·00357		9·04295	5·3185	0·20993	3·833	0·4231	1·767
May	18	+0·10987	0·11008	−0·00469		9·04230	5·3170	0·21063	3·839	0·4231	1·770
	29	+0·10984	0·10995	−0·00246		9·04198	5·3170	0·21027	3·838	0·4228	1·770
June	8	+0·10965	0·10973	−0·00179		9·04117	5·3040	0·21326	3·855	0·4239	1·778
July	13	+0·10988	0·11003	−0·00335		9·04222	5·3180	0·21154	3·843	0·4235	1·772
	25	+0·10952	0·10966	−0·00314		9·04078	5·2995	0·21319	3·857	0·4236	1·778
August	17	+0·10978	0·10996	−0·00403		9·04188	5·3160	0·21017	3·838	0·4227	1·770
	31	+0·10941	0·10950	−0·00202		9·04025	5·3170	0·21040	3·846	0·4220	1·774
September	21	+0·10903	0·10923	−0·00450		9·03895	5·3280	0·20827	3·843	0·4204	1·772
October	31	+0·10894	0·10903	−0·00203		9·03838	5·3300	0·20742	3·842	0·4197	1·771
November	30	+0·10913	0·10923	−0·00225		9·03915	5·3255	0·20786	3·840	0·4203	1·771
December	18	+0·10878	0·10898	−0·00451		9·03795	5·3255	0·20806	3·846	0·4198	1·774

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

METEOROLOGICAL OBSERVATIONS.

1866.

MONTH and DAY, 1866.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Osler's. General Direction. P.M.	Osler's. Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.
		in	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.
Jan. 1	Full	29·587	48·9	34·2	39·5	34·5	75·0	31·4	44·2	42·7	5·0	8·1	0·0	+ 2·2	SW:NW:WSW	SW	7·0	0·0	0·3	329
2	..	29·742	48·2	35·5	43·7	40·2	59·8	31·1	43·2	42·0	3·5	6·7	0·0	+ 6·7	SW : SSW	SSW	21·5	0·0	2·3	606
3	..	29·812	49·0	38·8	43·9	37·0	77·0	33·0	42·0	41·7	6·9	9·5	3·9	+ 7·2	SW : W by S	WSW : SW	16·2	0·0	2·1	323
4	..	29·683	51·8	40·5	46·4	41·7	65·0	40·5	42·0	41·2	4·7	8·0	0·0	+10·0	SW : SSW	SSW	4·0	0·0	0·1	371
5	..	29·728	49·7	39·4	44·7	42·7	55·7	33·2	41·9	40·7	2·0	3·8	0·0	+ 8·5	SW	NW : N by E	0·0	0·0	0·0	140
6	..	29·934	42·2	32·2	36·7	32·8	50·5	28·0	42·0	40·7	3·9	7·7	0·0	+ 0·7	Calm	Calm : SW	0·0	0·0	0·0	327
7	In Equator.	29·396	46·6	29·4	40·9	38·1	58·7	26·9	43·0	42·2	2·8	5·3	0·0	+ 5·1	SW	SW : W	15·0	0·0	1·5	481
8	Last Qr.	29·090	49·0	37·2	41·9	35·1	72·4	34·0	42·0	41·0	6·8	11·2	0·7	+ 6·2	SW : WNW	W	33·0	0·0	5·5	575
9	Apogee	28·893	40·6	32·4	35·3	29·2	71·0	28·4	42·0	40·7	6·1	11·3	1·6	— 0·5	W	W : WSW	10·0	0·0	0·4	449
10	..	29·048	43·8	30·8	38·2	33·9	61·0	27·9	41·7	39·7	4·3	8·4	0·0	+ 2·3	W	W : SW	2·0	0·0	0·1	297
11	..	28·888	36·8	29·9	32·1	30·1	36·8	27·1	42·0	36·7	2·0	4·8	0·0	— 3·9	NE	NNE : N : NW	18·0	0·0	1·5	372
12	..	29·607	36·1	23·8	30·9	28·3	41·6	20·4	40·0	35·7	2·6	4·9	0·0	— 5·2	SW : WNW	NW : W	1·2	0·0	0·1	308
13	..	29·440	48·3	23·7	39·1	38·9	48·3	22·7	39·0	34·7	0·2	2·2	0·0	+ 2·9	SSW	SW : WSW	16·0	0·0	1·1	482
14	Greatest Declination S	29·679	53·2	46·0	50·2	46·1	65·6	44·2	39·0	34·7	4·1	6·2	0·0	+13·9	WSW	SW	12·5	0·0	2·1	588
15	..	29·851	50·2	41·8	45·7	38·3	80·0	37·2	42·0	36·7	7·4	10·5	0·2	+ 9·3	SW	W : SW	7·5	0·0	0·9	409
16	New	29·657	50·6	39·2	46·4	42·3	56·0	35·7	44·0	39·7	4·1	10·3	0·5	+ 9·9	SW	W : NW	11·3	0·0	0·4	390
17	..	30·022	[illegible]	[illegible]	45·7	43·2	[illegible]	35·2	43·0	41·7	2·5	4·2	0·9	+ 9·1	W : WSW	W	5·0	0·0	0·2	453
18	..	29·884	49·7	44·3	47·1	43·1	52·6	42·3	43·0	40·7	4·0	5·7	1·3	+10·4	WSW : SW	SW	8·8	0·0	0·2	486
19	..	29·582	51·6	42·0	46·9	40·5	77·0	39·8	45·0	42·7	6·4	10·0	0·0	+10·0	SW	WSW : SW	7·5	0·0	0·9	547
20	..	29·506	51·9	41·2	46·6	42·3	67·5	38·0	45·0	43·7	4·3	7·8	0·2	+ 9·6	SW	WSW : SW	12·0	0·0	2·0	296
21	In Equator.	29·678	53·0	42·6	48·5	44·3	60·0	40·6	46·0	44·7	4·2	11·2	0·0	+11·3	SW	SW	11·0	0·0	0·8	579
22	..	29·660	54·3	43·3	49·0	46·7	69·0	41·2	46·0	44·7	2·3	5·4	0·4	+11·6	SW	SW : W	10·0	0·0	1·1	345
23	First Quarter Perigee	30·099	48·8	39·2	44·5	38·0	63·8	34·2	47·0	45·7	6·5	9·2	0·0	+ 6·8	W : NW	N : NNW	1·5	0·0	0·1	225
24	..	30·448	45·3	32·0	38·8	36·0	56·5	27·1	46·0	44·7	2·8	6·4	0·0	+ 0·9	NW : WSW	NW : WSW	0·0	0·0	0·0	161
25	..	30·484	44·5	34·0	40·1	36·5	49·2	28·7	45·0	44·7	3·6	6·9	0·0	+ 2·0	SW	WSW	0·0	0·0	0·0	153
26	..	30·417	46·6	33·3	40·7	38·3	62·6	29·8	44·0	43·7	2·4	5·2	0·0	+ 2·4	W	Calm : WSW	0·0	0·0	0·0	87
27	Greatest Declination N	30·181	43·8	36·9	40·3	36·4	49·6	31·8	43·4	43·1	3·9	5·1	0·2	+ 1·9	W	Variable	0·0	0·0	0·0	180
28	..	29·779	49·2	36·6	44·5	42·4	77·8	36·0	..	..	2·1	4·4	0·0	+ 6·1	SW : SSW	SW	2·0	0·0	0·2	385
29	..	29·693	48·2	38·2	42·9	33·3	88·2	34·1	42·0	41·7	9·6	13·2	3·7	+ 4·6	WSW : W	W	7·5	0·0	0·5	301
30	Full	29·894	46·1	35·6	41·4	36·4	75·0	32·2	43·0	42·2	5·0	11·0	0·0	+ 3·3	W : SW	SSE	0·0	0·0	0·0	201
31	..	29·400	50·0	43·6	47·2	44·1	62·1	42·0	..	40·7	3·1	4·8	0·0	+ 9·3	S	SW	2·3	0·0	0·4	355
Means	..	29·702	47·8	36·7	42·6	38·4	62·6	33·4	43·0	41·2	4·2	7·4	0·4	+ 5·6	...	...	..	..	..	Sum 11201

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29^{in}·877 on the 2nd ; the first minimum in the month was 29^{in}·515 on the 2nd.
The second maximum ,, was 29^{in}·854 on the 3rd ; the second minimum ,, was 29^{in}·669 on the 4th.
The third maximum ,, was 29^{in}·945 on the 6th ; the third minimum ,, was 29^{in}·058 on the 8th.
The fourth maximum ,, was 29^{in}·130 on the 8th ; the fourth minimum ,, was 28^{in}·870 on the 9th.
The fifth maximum ,, was 29^{in}·096 on the 10th ; the absolute minimum ,, was 28^{in}·661 on the 11th.
The sixth maximum ,, was 29^{in}·827 on the 12th ; the sixth minimum ,, was 29^{in}·356 on the 13th.
The seventh maximum ,, was 29^{in}·731 on the 14th ; the seventh minimum ,, was 29^{in}·629 on the 14th.
The eighth maximum ,, was 29^{in}·955 on the 15th ; the eighth minimum ,, was 29^{in}·533 on the 16th.
The ninth maximum ,, was 30^{in}·093 on the 17th ; the ninth minimum ,, was 29^{in}·538 on the 19th.
The tenth maximum ,, was 29^{in}·612 on the 19th ; the tenth minimum ,, was 29^{in}·430 on the 20th.
The eleventh maximum ,, was 29^{in}·701 on the 21st ; the eleventh minimum ,, was 29^{in}·625 on the 22nd.
The absolute maximum ,, was 30^{in}·500 on the 25th ; the twelfth minimum ,, was 29^{in}·633 on the 29th.
The thirteenth maximum ,, was 29^{in}·937 on the 30th.
The range in the month was 1^{in}·839.
The mean for the month was 29^{in}·702, being 0^{in}·055 *lower* than the average of the preceding 25 years.

TEMPERATURE OF THE AIR.

The highest in the month was 54°·3 on the 22nd; the lowest was 23°·7 on the 13th.
The range ,, was 30°·6.
The mean ,, of all the highest daily readings was 47°·8, being 4°·7 *higher* than the average of the preceding 25 years.
The mean ,, of all the lowest daily readings was 36°·7, being 3°·3 *higher* than the average of the preceding 25 years.
The mean daily range was 11°·1, being 1°·4 *greater* than the average of the preceding 25 years.
The mean for the month was 42°·6, being 4°·5 *higher* than the average of the preceding 25 years.

TH d Y, 6.	ELECTRICITY. A.M.	ELECTRICITY. P.M.	CLOUDS AND WEATHER. A.M.	CLOUDS AND WEATHER. P.M.
1			0	0 : 0 : 1, ci
2			4, ci, ci.-cu, ci.-s	10, ci.-cu, sc : 10, th.-cl, ci.-s, sc : 10, ci.-s, sc, h.-r, st.-w
3			10, r, w : 0	1, ci, ci.-s : 8, li.-cl, ci : 10, th.-cl
4			10 : 10, th.-r, v	8, ci, ci.-s : v, ci, ci.-cu, ci.-s : 4, ci, ci.-cu
5			10, sl.-r : 10, oc.-shs	10 : 10 : 10, li.-cl, h
6	0	0 : w	9, th.-cl	9, ci.-cu, ci.-s, h : 0, h.-fr, ms
7	w N	0	10, ci.-s, sc, r	10, cu.-s, ci.-cu : 0 : 0
8	0	ss P, ss N, sp, g.-cur: 0	10, h.-r : 1, ci, st.-w, sq	v, ci, ci.-s, cu.-s, r, st.-w : v, l, oc.-shs, w : v, l, ms
9			h.-fr : 5, li.-cl	2, li.-cl, ci : 0, l, h.-fr, ms
10			h.-fr : 5, ci, ci.-cu, sl.-r	10, sc : v, ci, ci.-s, cu.-s, sc : 10, th.-r
1			10, h.-r : 10, sn : 10, sc, sn	10, sc, sn, st.-w : 0, ms
12			10, sn : 10, sc, glm	4, ci, ci.-cu, ci.-s: 0, h : 0, sl.-f
13			10, h.-r, sc, w	10, c.-h.-r : 10 : 10
14			10, sc	10, ci.-s, sc, vv : 10, sc : 10, st.-w, sc, r
15			10, h-r : 0	3, ci, ci.-cu, v : vv, th.-cl, sl.-r, ms
16			10, r, sc	v, r, sc : 6, li.-cl, v : v, th.-cl, ms
17			10, sl.-r	10, sc : vv, sl.-r : 0
18			10, sc, th.-r	10, sc, th.-r : 10
19			v, ci, ci.-s, sc, oc.-r	6, ci.-cu, cu, cu.-s, ci.-s, sl.-r : vv, th.-cl, m
0			7, ci, ci.-cu, ci.-s, sc, v, r	10, ci.-s, cu.-s, ci, sc, v : v
1			10, sc, th.-r	10, ci.-s, cu.-s, sc : 1, ci.-s
2			10, sl.-r	10, sc : 10, h.-r : 10
3			10, ci.-cu, li.-cl, v	8, ci, ci.-cu, ci.-s, v : vv : vv, ci.-cu, cu.-s
4		0 : w	h.-fr : 3, h.-fr, h	6, ci, h : 7, ci, ci.-cu, h, glm, v : 10, li-cl, f
5	0	w	10, li.-cl, h	10 : 10, ci.-s
6	w	w	9, th.-cl, sl.-f	9, th.-cl, h, sl.-f : 10
7	w	w	10	10 : v : 10
8	w	w	10, th.-r, v	10 : 10, sl.-r : 10, ci, ci.-cu
9	0	0	vv : vv, ci, ci.-s, cu.-s, ci.-cu	6, ci.-cu, ci, vv : vv, ci, ci.-cu, cu.-s : vv, th.-cl, lu.-co
0	m	w	10, ci.-cu, ci.-s	8, ci.-cu, ci, sl.-r : 10, oc.-r : 10
1	0	s N, sp, g.-cur : w	7, ci, ci.-s, th.-r	10, th.-r, sc : 10, c.-r : [illegible] : 10, ci.-s

MIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 49°·2 on the 22nd; and the lowest was 22 ·4 on the 12th.

The mean ,, was 38 ·4, being 3°·4 *higher* than the average of the preceding 25 years.

lastic Force of Vapour.—The mean for the month was 0^{in}·234, being 0^{in}·032 *greater* than the average of the preceding 25 years.

Veight of Vapour in a Cubic Foot of Air.—The mean for the month was 2 [illegible]·7, being 0 [illegible]·3 *greater* than the average of the preceding 25 years.

egree of Humidity—The mean for the month was 86 (that of Saturation being represented by 100), being 2 *less* than the average of the preceding 25 years.

Veight of a Cubic Foot of Air.—The mean for the month was 548 grains, being 6 grains *less* than the average of the preceding 25 years.

UDS.

he mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·5.

NE.

he mean amount for the month, on a scale ranging from 0 to 10, was 1·0.

ND.

he proportions were of N. 2, S. 9, W. 18, E. 1, and Calm 1. The greatest pressure in the month was 33^{lbs}·0 on the square foot, on the 8th.

N.

ell on 17 days in the month, amounting to 3^{in}·68, as measured in the simple cylinder gauge partly sunk below the ground; being 1 [illegible]·92 *greater* than the average fall of the preceding 51 years.

CTRICITY.—The electrical apparatus was not in action from January 1 to 5, and January 9 to 23.

MONTH and DAY, 1866.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	WIND AS DEDUCED FROM ANEMOMETERS.					
			Dry.			Dew Point.	Highest in the Sun's Rays, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M.						OSLER'S.					ROBINSON'S
															General Direction.		Pressure in lbs. on the square foot.			
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.	Amount of Horizontal Movement of the Air on each Day.
		in.															lbs.	lbs.	lbs.	miles
Feb. 1	..	29·194	57·0	45·3	50·8	47·9	70·0	41·5	..	41·7	2·9	5·9	0·8	+ 13·0	SW	SW : WSW	7·0	0·0	0·7	488
2	..	29·341	53·6	41·5	46·3	42·7	62·1	36·0	..	41·2	3·6	7·0	0·0	+ 8·6	W : WSW	NW : WNW	7·0	0·0	0·8	340
3	In Equator.	29·569	49·0	36·9	42·7	38·4	77·8	31·2	..	40·7	4·3	6·5	1·0	+ 4·9	W : SW	SW : W : W by N	7·5	0·0	0·7	437
4	..	29·743	50·6	35·9	44·1	40·1	50·6	31·0	..	40·7	4·0	5·9	3·2	+ 6·1	W : WSW	WSW	12·5	0·0	2·4	517
5	..	29·784	50·7	38·2	44·1	38·5	89·0	33·2	..	41·7	5·6	11·3	0·0	+ 5·8	W	W : SW	5·5	0·0	0·6	495
6	Apogee	29·643	55·0	44·7	50·6	43·1	104·5	42·8	..	40·7	7·5	12·4	4·2	+ 12·0	WSW	W : WSW	13·0	0·0	3·8	675
7	Last Qr.	29·484	54·8	40·7	47·5	42·5	67·1	36·2	..	41·7	5·0	8·8	0·6	+ 8·7	WSW	W	15·0	0·0	4·2	531
8	..	29·792	49·5	37·5	42·4	34·0	100·7	33·0	..	39·7	8·4	12·0	1·9	+ 3·5	W by S	W : WSW	6·3	0·0	1·4	352
9	..	29·542	52·7	39·6	46·8	46·0	68·3	35·2	..	42·3	0·8	4·6	0·4	+ 7·9	SW : S	SW	4·5	0·0	0·5	343
10	Greatest Declination S	29·377	51·6	41·4	45·4	38·4	103·2	39·0	..	39·7	7·0	12·4	1·1	+ 6·6	SW	SW	6·5	0·0	0·7	432
11	..	28·715	48·1	40·2	42·8	39·6	58·8	37·0	..	43·7	3·2	5·0	1·2	+ 4·2	SW : S	SW : W	30·0	0·0	7·2	675
12	..	29·258	44·8	33·0	39·0	32·7	61·0	28·0	..	42·7	6·3	8·8	1·0	+ 0·6	W	WNW : NW	8·0	0·0	0·9	..
13	..	29·552	42·5	29·8	35·4	28·0	74·2	23·7	..	42·2	7·4	13·8	0·0	− 2·9	W : NW	WNW : WSW	0·6	0·0	0·0	..
14	..	29·427	45·2	28·9	38·1	34·9	73·6	22·9	..	39·9	3·2	7·4	0·0	− 0·1	WSW : SSW	SSW	7·5	0·0	0·7	320
15	New	29·322	43·8	31·9	38·2	34·1	69·0	28·8	..	38·2	4·1	8·6	0·0	+ 0·1	SW	W : SW : S	1·5	0·0	0·1	303
16	..	29·363	48·0	37·7	42·5	41·7	53·4	37·0	..	37·7	0·8	2·6	0·4	+ 4·4	SW	Calm	0·0	0·0	0·0	136
17	In Equator.	29·754	43·1	33·6	36·3	31·3	46·5	27·0	..	35·7	5·0	6·9	3·8	− 1·9	NW : N	N	0·5	0·0	0·0	135
18	Perigee	29·830	39·5	24·2	30·6	25·4	54·6	17·3	..	38·7	5·2	12·0	0·0	− 7·7	Calm : WSW	NNW : Calm	0·0	0·0	0·0	123
19	..	29·896	40·3	26·5	32·7	30·7	74·6	20·9	..	37·2	2·0	5·8	0·0	− 5·8	Calm : WSW	Calm	0·0	0·0	0·0	64
20	..	29·876	43·3	25·7	34·6	30·7	91·5	20·0	..	35·7	3·9	10·6	1·3	− 4·1	Calm	NE : N	0·0	0·0	0·0	218
21	..	30·131	44·1	31·9	36·7	31·2	69·1	25·8	..	36·7	5·5	8·8	1·9	− 2·1	N by E	NE : Calm	1·0	0·0	0·0	192
22	First Qr.	29·928	44·7	26·7	36·8	34·7	53·0	22·4	..	36·7	2·1	7·1	0·5	− 2·2	SW	WSW : W	2·5	0·0	0·1	294
23	Greatest Declination N	29·625	51·7	34·6	42·8	38·9	73·9	30·0	..	36·9	3·9	7·4	1·8	+ 3·6	WSW	WSW : W	9·0	0·0	0·6	342
24	..	29·767	46·5	33·9	39·4	30·5	87·9	28·7	..	37·4	8·9	13·0	4·2	0·0	WNW	WNW : W : SW	3·2	0·0	0·1	436
25	..	29·303	48·0	37·0	41·7	37·7	64·6	33·8	..	38·2	4·0	8·2	2·4	+ 2·1	SW	SW	3·5	0·0	0·4	219
26	..	29·225	46·4	35·0	39·6	34·6	93·2	30·6	..	39·7	5·0	9·0	1·7	− 0·2	SW	SW : E	0·0	0·0	0·0	111
27	..	29·275	38·7	31·2	34·3	31·8	49·5	27·9	..	40·2	2·5	3·9	1·5	− 5·6	NE : N	NE	1·6	0·0	0·1	330
28	..	29·101	36·8	29·1	31·5	25·1	49·8	23·1	..	39·7	6·4	13·3	2·6	− 8·6	NNE	NNE : N	7·5	0·0	0·9	249
Means	..	29·529	47·1	34·7	40·5	35·9	71·1	30·1	..	39·5	4·6	8·5	1·3	+ 1·8	...	...	..	..	..	Sum 8762

BAROMETER READINGS FROM EYE-OBSERVATIONS.

		The first minimum in the month	was 29in·153 on the 2nd.
The first maximum in the month	was 29in·671 on the 3rd;	the second minimum ..	was 29in·428 on the 3rd.
The second maximum ..	was 29in·907 on the 4th;	the third minimum ..	was 29in·554 on the 4th.
The third maximum ..	was 29in·837 on the 5th;	the fourth minimum ,,	was 29in·418 on the 7th.
The fourth maximum ..	was 29in·859 on the 8th;	the absolute minimum ,,	was 28in·584 on the 11th.
The fifth maximum ..	was 29in·628 on the 13th;	the sixth minimum ,,	was 29in·261 on the 14th.
The sixth maximum ,.	was 29in·855 on the 18th;	the seventh minimum ,,	was 29in·824 on the 18th.
The absolute maximum ..	was 30in·197 on the 21st;	the eighth minimum ,,	was 29in·536 on the 23rd.
The eighth maximum ,.	was 29in·802 on the 24th;	the ninth minimum ,,	was 29in·189 on the 26th.
The ninth maximum ..	was 29in·302 on the 27th;	the tenth minimum ,,	was 29in·013 on the 28th.

The range in the month was 1in·613.
The mean for the month was 29in·529, being 0in·269 *lower* than the average of the preceding 25 years.

TEMPERATURE OF THE AIR.

The highest in the month was 57°·0 on the 1st; the lowest was 24°·2 on the 18th.
The range .. was 32°·8.
The mean ,, of all the highest daily readings was 47°·1, being 2°·3 *higher* than the average of the preceding 25 years.
The mean ,, of all the lowest daily readings was 34°·7, being 1°·2 *higher* than the average of the preceding 25 years.
The mean daily range was 12°·4, being 1°·1 *greater* than the average of the preceding 25 years.
The mean for the month was 40°·5, being 1°·9 *higher* than the average of the preceding 25 years.

MONTH and DAY, 1866.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Feb. 1	w	w	10, ci.-s, r : 9, r, ci, ci.-cu	9, ci, ci.-cu, sl.-r, v : 10, th.-cl, v, oc.-r : vv, lu.-co
2	0	w	10, ci.-s, sc, h.-r	10, sl.-r, ci.-s, ci.-cu : 0, m
3	w	ssP, ssN, sp, g.-cur : w	5, ci, ci.-cu, v	9, ci, ci.-cu, ci.-s, h.-r, hl : vv, sl.-r : vv
4	0	0	10, ci.-s, sc, oc.-r	10, ci.-s, cu.-s, sc, oc.-r : vv : 10, l, h.-sqs, h.-r
5			6, ci	7, ci, ci.-cu, ci.-s, vv : 10, th.-r
6			4, ci, ci.-s, w	8, li.-cl, ci, st.-w : 10, th.-cl, w : 10, l, ci.-cu, ci
7			10, w, ci.-s, sc, oc.-shs	10, ci, ci.-s, cu.-s, sc, vv, h.-shs, r, hl, w : 0, m
8			0	v, ci, ci.-cu : 0 : 0, h
9			r : h.-r : 10, th.-r	10, sc : 10, h.-r
10			10, r	5, ci, ci.-cu, th.-cl : v, oc.-r, m : h.-r, vv, m
11			v, a, m : 10, r : 10, h.-r, w	10, sc, fr.-h.-sqs, r, st.-w : 10, h.-sqs, r, w
12			10, r : 9, ci, ci.-cu, ci.-s	9, ci, ci.-cu, ci.-s : 0 : v, a, h.-fr, hl
13			0, h.-fr : 4, ci, h, sl.-sn	6, li.-cl, h : 0 : v, h.-fr, ms
14		ssN, ssP, sp, g.-cur : mN	h.-fr : 8, li.-cl	v, ci, ci.-cu, oc.-h.-shs, hl : 10, h.-r
15	w	w : 0 : w	10 : 10, ci, ci.-s, ci.-cu, cu.-s, h.-fr	10, sc : 10, cu.-s, ci.-s : 10, r
16	m	0 : m : w	10, c.-r, gt.-glm	10, c.-r : 10, th.-r : 10, r
17	0	0	10, ci.-s, cu.-s, s, glm	10, ci.-s, ci.-cu, glm : 10, ci.-s : 0, sl.-f, h.-fr
18	w	w	h.-fr : h.-fr : 1, h.-fr, h	1, h, f, ci : f : 0, f
19	w	w : 0	h.-fr : 5, h.-fr, h, li.-cl	v, ci, ci.-cu, ci.-s, h : 0, th.-f, h.-fr
20			2, h.-fr, f, h, li.-cl	5, ci, ci.-s, li.-cl, sl.-f : 8, li.-cl : 10
21			10, ci, ci.-cu, ci.-s	10, ci, ci.-cu, ci.-s, cu.-s : v, li.-cl : 0, h.-fr, v
22			10, th.-cl, ci.-s, sl.-r	10, ci.-s, th.-r, sc : 8, li.-cl, f, h, lu.-co, lu.-ha
23			h.-fr : 10, sc	6, ci, ci.-s, cu.-s, v, sl.-r : v, shs.-r, hl : v, ci, lu.-co
24			6, ci, h	4, ci, ci.-s, cu.-s, h : 0, h, lu.-ha
25			10, sc, r	10, sc, h.-r, hl : 10, th.-cl : 10, ci.-s, cu.-s
26			10, r	5, ci, cu, cu.-s : v, oc.-r : 10, glm, lu.-co, r
27			h.-r : sl.-sn : 10, gt.-glm, h, ci.-s	10, ci.-s : 10, ci.-s : 0, lu.-co, lu.-ha
28			fr : 10, fr, sl	10, sc, sl, oc.-sn : v : 0

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 51°·8 on the 2nd; and the lowest was 16°·4 on the 28th.

The mean ,, was 35°·9, being 1°·3 *higher* than the average of the preceding 25 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot211$, being $0^{\text{in}}\cdot009$ *greater* than the average of the preceding 25 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{\text{grs}}\cdot4$, being *the same as* the average of the preceding 25 years.

Degree of Humidity.—The mean for the month was 85 (that of Saturation being represented by 100), being *the same as* the average of the preceding 25 years.

Weight of a Cubic Foot of Air.—The mean for the month was 547 grains, being 7 grains *less* than the average of the preceding 25 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·2.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·7.

WIND.

The proportions were of N. 5, S. 6, W. 14, E. 0, and Calm 3. The greatest pressure in the month was $30^{\text{lbs}}\cdot0$ on the square foot on the 11th.

RAIN.

Fell on 18 days in the month, amounting to $4^{\text{in}}\cdot03$, as measured in the simple cylinder gauge partly sunk below the ground; being $2^{\text{in}}\cdot50$ *greater* than the average fall of the preceding 51 years.

ELECTRICITY.—February 5 to 13 and 20 to 28, the electrical apparatus was not in action.

MONTH and DAY, 1866.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer, with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Mar. 1	Full	29·379	34·1	22·5	28·3	23·5	41·4	16·2	..	36·7	4·8	9·9	0·0	−11·9	NE	ENE	0·7	0·0	0·1	244	0·01
2	In Equator	29·534	42·0	27·7	33·6	25·3	103·7	21·1	..	35·7	8·3	13·8	3·7	− 6·6	NE	N	0·0	0·0	0·0	138	0·00
3	..	29·503	38·3	26·0	31·9	24·7	56·7	17·8	..	35·7	7·2	13·8	4·8	− 8·3	Calm : SW	Calm : NW	0·0	0·0	0·0	86	0·00
4	..	29·553	39·8	27·3	33·8	32·8	51·7	20·3	..	35·7	1·0	5·8	0·0	− 6·3	SW	N	0·0	0·0	0·0	171	0·00
5	..	29·600	42·5	30·9	36·0	27·6	92·7	28·0	..	36·2	8·4	14·7	3·3	− 4·1	NE	NE : SSE	0·0	0·0	0·0	181	0·00
6	Apogee	29·125	44·4	32·2	37·0	31·7	84·0	28·4	36·8	36·7	5·3	11·7	1·1	− 3·1	S	S : SW	6·5	0·0	0·6	235	0·07
7	..	29·034	44·6	29·7	36·0	31·2	98·1	25·8	36·8	36·7	4·8	10·6	0·0	− 4·2	SW : WSW	SW : Calm	0·0	0·0	0·0	165	0·00
8	..	29·397	47·4	30·3	37·7	34·4	99·1	..	38·8	37·4	3·3	8·8	0·0	− 2·6	NNE	NE : N by E	2·3	0·0	0·1	426	0·02
9	Last Qr.	29·875	47·7	34·5	39·6	31·8	100·9	30·2	39·3	38·7	7·8	12·8	3·8	− 0·8	NNE	NNE	6·5	0·0	1·5	409	0·00
10	Greatest Declination S.	30·181	44·3	32·3	37·7	30·3	73·1	28·1	39·8	39·2	7·4	13·0	3·8	− 2·9	N by E	NNE	1·3	0·0	0·1	240	0·01
11	..	30·127	45·2	34·9	40·1	36·1	62·5	30·0	41·3	41·2	4·0	6·8	3·3	− 0·8	N : WSW	WSW : W	0·0	0·0	0·0	216	0·00
12	..	29·664	51·5	34·5	41·0	35·5	91·0	30·2	..	..	5·5	12·2	1·0	− 0·2	WSW	WNW : W	1·6	0·0	0·1	376	0·00
13	..	29·409	44·3	31·4	36·3	29·0	68·2	26·7	40·8	40·7	7·3	13·4	3·1	− 5·1	WSW : N	N	4·0	0·0	0·1	193	0·00
14	..	29·364	40·7	25·7	32·1	23·7	62·0	18·5	..	..	8·4	14·0	3·1	− 9·4	N	Calm	0·0	0·0	0·0	170	0·00
15	..	29·130	43·3	28·1	36·3	27·7	74·0	21·4	38·8	38·8	8·6	14·3	3·6	− 5·4	S by E	S	5·2	0·0	0·4	314	0·00
16	New. In Equator	29·054	55·3	35·6	44·9	37·9	92·0	33·0	40·8	39·7	7·0	17·2	1·5	+ 3·0	S	SE	4·5	0·0	0·3	232	0·00
17	..	29·023	52·9	38·7	44·3	40·0	88·3	35·1	41·8	40·7	4·3	10·6	0·7	+ 2·3	Calm : S : SW	SSW : S	0·3	0·0	0·0	223	0·17
18	Perigee	29·144	52·7	34·8	43·7	39·7	82·4	30·1	43·8	43·7	4·0	10·2	0·5	+ 1·6	SE : E	SE : Calm	0·0	0·0	0·0	175	0·01
19	..	29·082	50·4	38·0	42·6	39·2	79·3	31·8	44·8	43·9	3·4	7·2	0·0	+ 0·4	Calm : ENE	E : NE	0·0	0·0	0·0	197	0·03
20	..	29·254	43·6	37·9	40·1	36·6	53·4	37·0	45·8	44·7	3·5	4·8	2·8	− 2·1	NE : ENE	E : ENE	1·3	0·0	0·0	313	0·21
21	..	29·434	39·0	32·7	34·6	32·4	54·0	29·0	44·8	44·4	2·2	3·9	0·9	− 7·7	NE	NE	0·0	0·0	0·0	196	0·03
22	..	29·678	44·2	30·1	35·2	28·7	77·5	23·4	45·0	44·7	6·5	13·9	1·2	− 7·0	N	N : Calm	1·2	0·0	0·0	196	0·00
23	Greatest Declination N. First Quarter	29·497	48·7	32·8	40·7	32·8	94·0	29·4	43·6	41·7	7·9	16·8	1·4	− 1·5	Calm : S	S	15·0	0·0	2·5	495	0·12
24	..	28·941	52·7	35·2	44·5	38·8	101·8	35·0	42·8	42·2	5·7	12·0	1·6	+ 2·3	SW	SW : W	6·3	0·0	0·7	424	0·49
25	..	29·699	56·1	42·3	47·2	39·5	89·4	33·7	44·8	43·7	7·7	11·4	4·2	+ 4·9	NW	NW	3·5	0·0	0·3	166	0·01
26	..	30·029	56·2	33·1	45·2	41·7	87·0	28·3	43·8	42·9	3·5	11·0	1·2	+ 2·7	Calm	SW	0·0	0·0	0·0	262	0·00
27	..	29·957	60·8	45·6	52·0	43·3	122·5	41·8	43·0	40·9	8·7	18·6	2·9	+ 9·1	SW	W	0·5	0·0	0·0	219	0·14
28	..	29·994	58·8	43·0	50·0	45·4	122·7	38·5	44·8	44·7	4·6	9·7	2·4	+ 6·8	WSW	WSW : SW	0·0	0·0	0·0	213	0·00
29	..	30·005	62·8	45·9	52·9	49·8	96·7	45·1	45·0	43·7	3·1	10·1	0·4	+ 9·3	WNW : W	WSW	0·0	0·0	0·0	210	0·01
30	In Equator	30·015	64·0	50·1	54·4	45·0	108·7	49·6	48·8	45·7	9·4	15·1	2·7	+10·4	W	NW : W	0·5	0·0	0·0	146	0·00
31	Full	29·663	51·2	44·5	46·7	43·5	73·3	44·0	49·8	46·7	3·2	5·3	2·0	+ 2·3	W : NE : Calm	Calm : N	0·0	0·0	0·0	170	0·30
Means	..	29·527	48·4	34·5	40·5	34·8	83·3	30·2	42·7	40·8	5·7	11·4	2·0	− 1·1	...	...	..	..	..	Sum 7401	Sum 1·63

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29$^{\text{in}}$·570 on the 2nd; the first minimum in the month was 29$^{\text{in}}$·491 on the 3rd.
The second maximum ,, was 29$^{\text{in}}$·659 on the 5th; the second minimum ,, was 29$^{\text{in}}$·019 on the 7th.
The absolute maximum ,, was 30$^{\text{in}}$·233 on the 10th; the third minimum ,, was 28$^{\text{in}}$·973 on the 17th.
The fourth maximum ,, was 29$^{\text{in}}$·179 on the 18th; the fourth minimum ,, was 29$^{\text{in}}$·062 on the 19th.
The fifth maximum ,, was 29$^{\text{in}}$·774 on the 22nd; the absolute minimum ,, was 28$^{\text{in}}$·912 on the 24th.
The sixth maximum ,, was 30$^{\text{in}}$·053 on the 26th; the sixth minimum ,, was 29$^{\text{in}}$·941 on the 27th.
The seventh maximum ,, was 30$^{\text{in}}$·042 on the 28th; the seventh minimum ,, was 29$^{\text{in}}$·952 on the 28th.
The eighth maximum ,, was 30$^{\text{in}}$·050 on the 30th.
The range in the month was 1$^{\text{in}}$·321.
The mean for the month was 29$^{\text{in}}$·527, being 0$^{\text{in}}$·229 *lower* than the average of the preceding 25 years.

TEMPERATURE OF THE AIR.

The highest in the month was 64°·0 on the 30th; the lowest was 22°·5 on the 1st.
The range ,, was 41°·5.
The mean ,, of all the highest daily readings was 48°·4, being 1°·6 *lower* than the average of the preceding 25 years.
The mean ,, of all the lowest daily readings was 34°·5, being 0°·8 *lower* than the average of the preceding 25 years.
The mean daily range was 13°·9, being 0°·8 *less* than the average of the preceding 25 years.
The mean for the month was 40°·5, being 1°·2 *lower* than the average of the preceding 25 years.

MONTH and DAY, 1866.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Mar. 1			0, h.-fr : 10, ci.-s, cu.-s	10, sn : 10, sn, th.-cl : 8, th.-cl, m
2			10, ci.-cu : 3, ci	3, ci, ci.-cu, cu : 0, h : 0, lu.-co, f, h.-fr
3			0, h.-fr : 2, li.-cl, h.-fr, h, sl.-f	10, glm, sl.-f : 10, ci.-s, th.-cl, f : 10, th.-cl, f
4	o	o	10, li.-cl, h, gt.-glm	10, li.-cl, ci, ci.-s, v : v
5	o	o : m	8, ci.-cu, ci	5, ci, ci.-cu, cu.-s : 10, sl
6	o	ssN, ssP, sp, g.-cur : m : w	9, ci, ci.-cu	10, r : 0, h.-fr, m
7	o	w : m	6, ci, ci.-s, v	6, ci, ci.-s, ci.-cu, cu.-s : v : 0
8	w : ss N, ss P, g.-cur, sp	ssN, ssP, sp, g.-cur : w : w	10, ci.-s, hl, r	v, ci, ci.-cu, cu, ci.-s, hl, r : vv, m
9			vv : 9, ci.-cu, ci.-s	8, ci.-cu, ci, cu, ci.-s, sl.-r : v
10			10, ci.-cu, ci.-s, sc, sl.-r, sl.-sn	9, ci, ci.-cu, cu.-s, v : v, th.-cl
11			10, ci.-s, h, sl.-f	10, h, li.-cl, ci.-s, gt.-glm : v : v, th.-cl
12			10	8, ci, ci.-cu, ci.-s : 8, sl.-r : 0, ms
13			10, ci.-s, sl.-r	10, oc.-sn, oc.-r : 0, h.-fr, m
14			0, h.-fr : 7, ci, h, h.-fr	8, li.-cl, h, ci, ci.-cu : 9, ci.-s, cu.-s, h : 0, fr, h, ms
15			10, li.-cl	10, ci.-s, ci.-cu, ci : 10, oc.-r
16			8, ci, li.-cl	10, v, ci, li.-cl : 10 : 0, ms
17			0 : 10, h.-r	v, ci, ci.-s, cu, cu.-s : v, ci, th.-cl : v, th.-cl, ms
18			6, ci, ci.-s	10, li.-cl : 10, li.-cl, th.-r : 10, r
19		o : o : w	10, sl.-r	9, li.-cl, ci, ci.-cu : v : 10
20	o	o	10, ci.-s, sc, sl.-r	10, oc.-r : 10, oc.-r : 10, h.-r
21	m	o	10, sl.-r, sl.-sn	10, th.-r, sl : v, oc.-r : 10
22	w	ssP, ssN, sp, g.-cur : w	10 : 6, li.-cl, h	8, cu, ci.-cu, ci.-s, sl.-sn, v : v, h.-fr
23	w	w : o	10	9, li.-cl, ci, ci.-cu, ci.-s, w : 10, h.-sqs, h.-r, st.-w
24			10, c.-r : v, r	v, oc.-h.-shs : 10, oc.-shs
25			10, sl-r : 10, v	v : v, li.-cl
26		m : o : m	10, ci.-cu, ci.-s	10, th.-cl, ci, ci.-cu, ci.-s : 10, ci.-cu, ci.-s
27	w	w : o	10, r, sc	4, ci, ci.-cu, ci.-s : 0
28	m	w : o	8, ci, ci.-cu, ci.-s	10, cu.-s, ci.-s, sc : 10, ci.-s, cu.-s, sc, sl.-r
29	o	o : w : o	10, th.-cl, glm	10, li.-cl, h : v, sl.-r : 10
30	m	w : o	10	8, li.-cl : 10, th.-cl, h, sl-r : 10, th.-cl, sl.-r
31	w N	w : o : w	10, h.-r : 10, c.-h.-r : 10, sc, th.-r	10, gt.-glm, th.-r : 10, oc.-r, glm : 10, ci.-s, cu.-s

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was $52^{\circ}\cdot2$ on the 29th; and the lowest was $20^{\circ}\cdot6$ on the 14th.

The mean ,, was $34^{\circ}\cdot8$, being $1^{\circ}\cdot7$ *lower* than the average of the preceding 25 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot202$, being $0^{in}\cdot015$ *less* than the average of the preceding 25 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{grs}\cdot3$, being $0^{gr}\cdot2$ *less* than the average of the preceding 25 years.

Degree of Humidity.—The mean for the month was 81 (that of Saturation being represented by 100), being 1 *less* than the average of the preceding 25 years.

Weight of a Cubic Foot of Air.—The mean for the month was 547 grains, being 3 grains *less* than the average of the preceding 25 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 8·1.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·6.

WIND.

The proportions were of N. 8, S. 7, W. 7, E. 5, and Calm 4. The greatest pressure in the month was $15^{lbs}\cdot0$ on the square foot on the 23rd.

RAIN.

Fell on 15 days in the month, amounting to $1^{in}\cdot63$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}\cdot04$ *greater* than the average fall of the preceding 51 years.

ELECTRICITY.—The insulating lamp was not burning from March 1 to 3, 10 to 18, and 24 to 26.

MONTH and DAY, 1866.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	WIND AS DEDUCED FROM ANEMOMETERS.						Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer, with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M.						OSLER'S.					ROBINSON'S	
															General Direction.		Pressure in lbs. on the square foot.				
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.	Amount of Horizontal Movement of the Air on each Day.	
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
April 1	..	29·329	54·2	35·2	43·0	34·8	119·1	30·0	..	..	8·2	16·4	0·0	− 1·6	NW : WSW	SW : Calm	0·0	0·0	0·0	138	0·00
2	..	29·281	50·5	35·4	40·8	38·1	92·5	29·0	..	..	2·7	7·8	1·0	− 4·0	Calm : N	N	0·0	0·0	0·0	242	0·11
3	Apogee	29·482	51·4	38·6	41·8	36·9	122·7	38·2	..	..	4·9	10·8	1·2	− 3·2	N	N : NE : Calm	0·0	0·0	0·0	123	0·29
4	..	29·532	47·3	34·8	39·0	36·6	74·0	30·0	..	..	2·4	9·0	0·0	− 6·2	Calm	S : SE	0·0	0·0	0·0	138	0·14
5	..	29·751	50·8	34·2	42·3	39·6	107·0	28·3	..	..	2·7	9·9	0·0	− 3·1	Calm : SE	ESE : E	1·0	0·0	0·0	332	0·01
6	Greatest Declination S.	29·869	54·6	40·7	46·3	41·8	119·0	36·7	..	..	4·5	9·2	1·1	+ 0·9	E	E : ENE	5·0	0·0	0·8	401	0·07
7	..	29·764	48·7	41·6	43·8	42·5	58·4	39·7	..	..	1·3	2·1	0·7	− 1·6	NE	NE : Calm	0·5	0·0	0·0	158	0·00
8	Last Qr.	29·925	54·1	41·4	45·2	43·5	99·1	41·0	..	..	1·7	5·6	0·0	− 0·2	E : Calm	E : NE	0·3	0·0	0·0	304	0·00
9	..	29·746	46·0	41·8	42·4	40·2	51·5	41·7	..	..	2·2	3·5	0·2	− 2·9	NE	NNE	2·8	0·0	0·2	199	0·26
10	..	29·689	55·0	41·3	45·7	42·1	93·4	39·8	..	..	3·6	9·6	1·4	+ 0·5	Calm	SW	0·0	0·0	0·0	177	0·00
11	..	29·396	57·4	41·8	48·2	42·6	120·8	38·0	48·8	47·4	5·6	11·4	2·6	+ 3·1	SE	SE : S	3·5	0·0	0·5	405	0·24
12	..	29·625	61·5	44·5	50·8	44·4	126·8	44·2	48·3	46·7	6·4	14·4	1·5	+ 5·8	W	SW	5·7	0·0	0·6	412	0·00
13	In Equator.	29·722	65·8	46·7	52·3	46·8	136·9	45·0	49·8	48·7	5·5	13·7	2·2	+ 7·4	SW	SW	3·5	0·0	0·1	321	0·01
14	..	29·870	62·0	41·3	49·9	43·6	138·8	37·2	50·0	48·9	6·3	15·6	0·9	+ 4·9	SW : WSW	WSW	5·5	0·0	0·2	394	0·03
15	New : Perigee.	30·089	60·9	40·4	50·8	43·4	131·2	34·1	50·8	49·7	7·4	13·7	1·2	+ 5·5	W by S	SW	3·4	0·0	0·2	492	0·00
16	..	29·785	54·8	47·1	48·8	44·7	66·6	45·8	51·5	50·2	4·1	7·6	3·4	+ 3·3	SW	SW	5·5	0·0	1·2	582	0·08
17	..	29·801	61·2	45·1	51·1	39·0	116·7	40·1	51·8	50·7	12·1	18·0	4·6	+ 5·4	WSW	W	4·0	0·0	0·9	369	0·00
18	..	29·831	66·4	38·9	51·4	42·0	137·2	32·2	52·3	50·9	9·4	20·9	0·5	+ 5·4	WSW	W : SW	0·0	0·0	0·0	299	0·00
19	Greatest Declination N.	29·666	65·4	41·5	52·4	43·5	124·1	36·0	52·5	51·7	8·9	17·8	4·2	+ 6·0	SW : S	SW : WSW	0·0	0·0	0·0	175	0·00
20	..	29·745	61·6	43·1	49·4	42·8	141·1	39·0	52·1	51·2	6·6	18·2	0·9	+ 2·7	W by S	WSW	2·0	0·0	0·0	272	0·28
21	First Quarter.	29·993	64·4	42·9	51·8	42·7	123·4	38·1	50·8	50·7	9·1	18·0	0·7	+ 4·8	W	NW : Calm	0·0	0·0	0·0	129	0·00
22	..	30·254	57·1	38·4	47·9	43·9	122·7	32·4	53·8	52·2	4·0	10·3	0·0	+ 0·7	Calm : SE	ESE : E	0·0	0·0	0·0	327	0·00
23	..	30·198	53·1	39·7	46·0	35·0	123·0	34·6	51·8	51·0	11·0	17·4	5·8	− 1·4	E by S	E	5·5	0·0	1·0	424	0·00
24	..	30·020	57·0	40·2	48·5	36·7	128·9	38·0	53·8	51·7	11·8	22·2	3·2	+ 0·9	ESE	ESE : E	6·7	0·0	0·9	310	0·00
25	..	29·927	63·5	41·6	52·9	40·6	136·4	38·7	54·3	52·2	12·3	23·4	1·2	+ 5·2	E	E	4·4	0·0	0·7	239	0·00
26	In Equator.	29·803	70·3	39·3	55·0	48·2	140·1	..	53·8	52·7	6·8	19·4	1·8	+ 7·1	E	E	0·3	0·0	0·0	163	0·00
27	..	29·598	79·0	49·4	63·0	50·6	151·4	43·2	54·8	52·7	12·4	27·4	5·3	+ 14·9	Calm	SSW : Calm	0·0	0·0	0·0	138	0·00
28	..	29·340	75·2	44·5	55·2	51·5	139·4	44·2	55·8	53·7	3·7	18·2	1·1	+ 6·8	Calm : WSW	W : WNW : NE	1·0	0·0	0·1	289	0·58
29	Full	29·661	47·7	39·2	41·1	36·4	73·5	39·2	..	..	4·7	9·2	3·2	− 7·7	NE	NE	2·0	0·0	0·1	335	0·34
30	Apogee.	29·586	49·5	34·2	40·8	31·2	125·2	30·0	..	..	9·6	14·1	2·7	− 8·5	NE : E	ENE	5·0	0·0	0·5	463	0·00
Means	..	29·743	58·2	40·8	47·9	41·5	114·7	37·4	52·0	50·7	6·4	13·8	1·8	+ 1·7	...	...	..	..	..	Sum 8750	Sum 2·44

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29$^{\text{in}}$·886 on the 6th; the absolute minimum in the month was 29$^{\text{in}}$·264 on the 2nd.
The second maximum ,, was 29$^{\text{in}}$·946 on the 8th; the second minimum ,, was 29$^{\text{in}}$·750 on the 7th.
The third maximum ,, was 30$^{\text{in}}$·134 on the 15th; the third minimum ,, was 29$^{\text{in}}$·266 on the 11th.
The fourth maximum ,, was 29$^{\text{in}}$·852 on the 18th; the fourth minimum ,, was 29$^{\text{in}}$·741 on the 16th.
The absolute maximum ,, was 30$^{\text{in}}$·286 on the 22nd; the fifth minimum ,, was 29$^{\text{in}}$·617 on the 19th.
The sixth maximum ,, was 29$^{\text{in}}$·705 on the 29th; the sixth minimum ,, was 29$^{\text{in}}$·291 on the 28th.
The range in the month was 1$^{\text{in}}$·022.
The mean for the month was 29$^{\text{in}}$·743, being 0$^{\text{in}}$·026 *lower* than the average of the preceding 25 years.

TEMPERATURE OF THE AIR.

The highest in the month was 79°·0 on the 27th; the lowest was 34°·2 on the 5th and 30th.
The range ,, was 44°·8.
The mean ,, of all the highest daily readings was 58°·2, being 0°·8 *higher* than the average of the preceding 25 years.
The mean ,, of all the lowest daily readings was 40°·8, being 1°·9 *higher* than the average of the preceding 25 years.
The mean daily range was 17°·4, being 1°·1 *less* than the average of the preceding 25 years.
The mean for the month was 47°·9, being 1°·1 *higher* than the average of the preceding 25 years.

MONTH and DAY, 1866.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
April 1	w	w : 0	10 : 4, ci, ci.-cu, h	7, ci, ci.-cu, h, ci.-s : 6, ci, ci.-cu, ci.-s, h, sl.-r : 4, ci, ci.-cu, ci.-s
2	w	sN, sP, g.-cur, sp : w : mN	10, th.-r	9, ci.-s, fr.-shs, r, hl : 10, fr.-shs, r, hl
3	w	ssN, ssP, g.-cur, sp : w	9, ci, ci.-cu, cu.-s, ci.-s, r, hl, v	v, ci.-cu, cu, cu.-s, ci, oc.-r : v, h.-r : 6, ci, th.-cl
4	ssP	ssN, ssP, g.-cur, sp : m : w	h, v	10, shs.-r, ci.-s, cu.-s, li.-cl : v, r
5	w	w : m	0 : 10, sl.-r	7, ci, ci.-cu, ci.-s : v, th.-cl : 10, r
6	w	w : 0	10, h.-r : 10 : 10	v, ci, ci.-cu, cu : 6, li.-cl
7	0	w : m	10	10, th.-r : th.-cl : 10, li.-cl, ci.-cu
8	sP, g.-cur, sp	w	10, f	10, ci.-s, cu.-s, ci, v : v, ci, ci.-s
9	w	0	10, th.-r	10, h.-r : 10, r
10	w	w	10	10 : v, th.-cl, m
11	w	wP, sN : w	10, ci.-s, th.-cl	10, ci.-s, ci, h.-r : v, ci, ci.-s, sc, r, m
12	0		10, ci-s, ci.-cu, v	8, ci.-cu, ci, ci.-s : 10, ci.-s : 10, ci.-s
13			10 : 9, ci, ci.-cu, ci.-s, th.-r, v	9, ci, ci.-s, ci.-cu, cu.-s, v, oc.-r : v : 0, l, m
14			0 : 9, ci, ci.-cu, ci.-s, cu.-s, v	7, ci.-cu, cu, ci.-s, oc.-shs : v : 0, ms
15			5, ci, ci.-cu, ci.-s, cu.-s	9, ci, ci.-cu, cu.-s : 10, li.-cl
16			10, r : 10, ci.-s, sc	10, sc, th.-r, sqs, li.-cl : 0, ms
17			0 : 8, ci.-cu, ci, ci.-s, cu.-s	v, ci, ci.-cu, ci.-s, cu.-s, h : 0, ms
18		: w	0, h	7, ci, ci.-cu, cu, ci.-s, cu.-s : v : 0, m
19	m	w	7, ci, ci.-cu, h	8, ci.-cu, cu.-s, sl.-r : 10, li.-cl
20	w	w N : 0	6, ci, ci.-cu, cu, ci.-s	8, cu.-s, cu, ci.-cu, ci, h.-r : 10, oc.-shs, hl, r : 1, ci, ci.-cu
21	0	0 : w	2, ci, ci.-cu, h	8, li.-cl, ci.-cu, cu : v, li.-cl : 0, sl.-f, ms
22	m	w	0 : 1, ci	6, ci, ci.-cu : v : 0
23	w	0	ci	0 : 0
24	w	w : 0	ci	0 : 0
25	0	0	0 : 0	0 : 0
26	0	0	0 : 1, ci	4, ci.-cu, cu, ci.-s, v : 0
27	m	0	li.-cl : 2, ci, h	3, ci : v, ci, th.-cl, ci.-s : v, ci.-s
28	w		10, ci.-s : 10, ci.-s, oc.-shs, v	10, oc.-r, ci.-s : 10, h.-r : 10, c.-h.-r
29			10, c.-r : 10, c.-r	10, c.-r, ci.-s, cu.-s, v : 10, ci.-s, cu.-s : 10, ci.-s, cu.-s
30			10, ci.-s, cu.-s, hl	v, ci.-cu, ci.-s, cu.-s : 10, ci.-s

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 57°·2 on the 28th; and the lowest was 30°·6 on the 30th.

The mean ,, was 41°·5, being 1°·2 *higher* than the average of the preceding 25 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}{\cdot}262$, being $0^{in}{\cdot}011$ *greater* than the average of the preceding 25 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $3^{grs}{\cdot}0$, being $0^{gr}{\cdot}1$ *greater* than the average of the preceding 25 years.

Degree of Humidity.—The mean for the month was 79 (that of Saturation being represented by 100), being *the same as* the average of the preceding 25 years.

Weight of a Cubic Foot of Air.—The mean for the month was 543 grains, being *the same as* the average of the preceding 25 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·3.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 1·2.

WIND.

The proportions were of N. 3, S. 5, W. 8, E. 10, and Calm 4. The greatest pressure in the month was $6^{lbs}{\cdot}7$ on the square foot on the 24th.

RAIN.

Fell on 13 days in the month, amounting to $2^{in}{\cdot}44$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{in}{\cdot}73$ *greater* than the average fall of the preceding 51 years.

ELECTRICITY.—The insulating lamp was not burning from April 13 to 18, and 28 to 30.

MONTH and DAY, 1866.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	WIND AS DEDUCED FROM ANEMOMETERS. OSLER'S. General Direction. A.M.	General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	ROBINSON'S. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in
May 1	.	29·320	43·2	38·3	39·7	36·4	69·5	37·5	51·1	49·7	3·3	5·1	1·6	−10·1	NE : ENE	NE : N	1·5	0·0	0·1	315	0·10
2	. .	29·424	51·2	36·1	40·6	35·3	110·0	36·1	49·8	49·2	5·3	12·6	3·0	− 9·7	N by W : NW	W : SW	0·0	0·0	0·0	162	0·00
3	Greatest Declination S	29·471	55·9	36·4	42·9	39·0	123·5	35·2	48·8	48·7	3·9	13·1	1·6	− 7·9	Calm : SE : SW	SW : WNW : Calm	1·0	0·0	0·0	139	0·13
4	. .	29·710	60·0	32·6	44·9	34·6	126·0	26·0	49·3	49·2	10·3	21·0	0·0	− 6·3	Calm	Variable	0·0	0·0	0·0	197	0·00
5	. .	29·953	61·5	34·1	47·2	39·7	132·0	30·0	49·8	48·7	7·5	17·4	2·8	− 4·3	SW	SW	0·7	0·0	0·0	245	0·08
6	. .	30·091	58·3	43·5	50·0	41·1	103·0	38·2	49·8	49·7	8·9	15·2	1·5	− 1·7	WSW	N : Calm	0·0	0·0	0·0	73	0·00
7	Last Qr.	30·071	62·9	46·4	53·4	41·4	95·2	43·7	50·8	49·7	12·0	18·6	2·9	+ 1·7	Variable	SW	0·0	0·0	0·0	168	0·00
8	. .	29·858	66·6	41·2	53·6	43·0	138·0	34·0	51·5	50·2	10·6	18·4	2·3	+ 1·9	SW	SW	0·0	0·0	0·0	323	0·00
9	. .	29·629	66·5	47·2	53·3	45·4	128·7	34·8	51·8	51·2	7·9	17·9	1·6	+ 1·8	SW : WSW	W	4·0	0·0	0·1	343	0·03
10	In Equator	29·821	62·0	43·7	50·9	39·9	109·1	35·5	52·8	51·6	11·0	20·9	2·0	− 0·4	W	W	2·0	0·0	0·0	349	0·00
11	. .	29·478	63·9	46·7	52·2	46·7	134·1	41·0	53·8	51·7	5·5	15·1	0·0	+ 1·0	SW	WSW	10·0	0·0	0·8	515	0·42
12	. .	29·493	59·6	41·7	48·7	42·6	117·4	37·2	54·0	52·0	6·1	14·6	0·0	− 2·5	WSW	W : N by W : NW	1·5	0·0	0·0	351	0·05
13	. .	29·895	53·2	38·6	44·8	35·9	98·0	30·8	52·5	51·7	8·9	16·2	3·7	− 6·6	NNW : N	NNW : N	0·0	0·0	0·0	181	0·00
14	Perigee : New.	30·014	54·8	39·4	45·3	35·7	97·2	34·1	51·8	51·5	9·6	17·8	4·1	− 6·4	Calm	NE	0·0	0·0	0·0	160	0·00
15	. .	30·197	52·4	35·0	43·7	33·0	118·5	26·5	53·8	52·7	10·7	18·4	2·3	− 8·3	N	NE : Calm	0·0	0·0	0·0	122	0·00
16	Greatest Declination N	30·218	56·0	34·5	46·1	39·2	116·0	29·9	52·8	51·7	6·9	14·1	0·8	− 6·2	Calm	SE	0·0	0·0	0·0	107	0·00
17	. .	30·118	65·4	36·9	49·3	40·8	146·4	28·2	53·2	52·7	8·5	23·4	0·0	− 3·3	Calm : SE : S	SE	0·0	0·0	0·0	106	0·00
18	. .	30·028	66·2	37·0	52·0	44·4	143·0	28·2	52·8	51·7	7·6	19·8	0·5	− 0·9	Calm	NE : E by S	0·0	0·0	0·0	158	0·00
19	. .	30·021	68·8	40·2	55·6	42·9	134·0	32·3	53·8	52·2	12·7	23·8	1·8	+ 2·4	Calm : SE	E by S	0·5	0·0	0·0	223	0·00
20	. .	30·120	66·2	40·7	54·0	41·4	150·7	40·3	54·8	53·2	12·6	22·6	1·1	+ 0·5	Calm : E	E	0·6	0·0	0·0	355	0·00
21	First Qr.	30·217	60·3	46·0	52·3	38·6	140·8	39·6	54·2	52·4	13·7	20·9	3·1	− 1·5	E	E : ENE	5·5	0·0	0·7	406	0·00
22	. .	30·124	60·6	42·0	51·0	35·9	140·5	40·3	53·8	. .	15·1	22·6	1·1	− 3·1	E	E by N	4·1	0·0	0·5	288	0·00
23	In Equator	29·921	68·1	37·8	53·4	44·0	151·0	29·0	. .	. .	9·4	21·4	0·5	− 0·9	Calm : NE	NE : Calm	0·0	0·0	0·0	187	0·00
24	. .	29·745	56·0	41·2	47·1	37·6	109·9	29·4	53·8	. .	9·5	13·9	5·3	− 7·5	NE	ENE	5·0	0·0	0·5	412	0·00
25	. .	29·604	59·3	39·3	49·9	36·3	151·0	32·7	52·8	. .	13·6	20·3	2·1	− 5·0	ENE	ENE : NE	5·5	0·0	1·0	409	0·00
26	. .	29·473	68·9	45·6	56·2	45·9	154·5	38·6	53·3	. .	10·3	21·1	4·4	+ 1·0	NE	E	2·0	0·0	0·0	178	0·00
27	Apogee	29·544	64·8	46·8	53·5	48·2	99·0	46·8	56·3	54·7	5·3	15·5	2·5	− 1·9	Calm	SW	0·0	0·0	0·0	138	0·80
28	. .	29·673	73·1	44·4	58·5	45·4	143·5	35·0	56·8	55·7	13·1	24·7	0·9	+ 2·8	Calm : SW	SW	0·0	0·0	0·0	179	0·00
29	Full	29·669	68·3	42·4	55·4	43·5	134·9	32·5	57·3	56·2	11·9	21·4	1·8	− 0·6	SW : NNE	N : NNE	0·0	0·0	0·0	202	0·00
30	. .	29·744	66·7	38·6	51·6	39·9	138·5	39·6	57·8	56·7	11·7	22·0	4·6	− 4·7	Calm	E	1·0	0·0	0·0	256	0·00
31	Greatest Declination S	29·551	64·0	49·3	55·4	50·6	103·2	47·1	58·0	56·7	4·8	11·2	0·4	− 1·2	E : SE	E	2·5	0·0	0·1	186	0·33
Means	. .	29·813	61·4	40·8	50·1	40·8	124·4	35·2	53·1	52·0	9·3	18·1	1·9	− 2·8	. . .	. . .	. .	. .	. .	Sum 7433	Sum 1·94

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 30^{in}·114 on the 7th; the absolute minimum in the month was 29^{in}·299 on the 1st.
The second maximum , , was 29^{in}·836 on the 10th; the second minimum , , was 29^{in}·608 on the 9th.
The absolute maximum , , was 30^{in}·252 on the 16th; the third minimum , , was 29^{in}·434 on the 12th.
The fourth maximum , , was 30^{in}·230 on the 21st; the fourth minimum , , was 30^{in}·015 on the 18th.
The fifth maximum , , was 29^{in}·694 on the 28th; the fifth minimum , , was 29^{in}·459 on the 26th.
The sixth maximum , , was 29^{in}·812 on the 30th; the sixth minimum , , was 29^{in}·630 on the 29th.
The range in the month was 0^{in}·953.
The mean for the month was 29^{in}·813, being 0^{in}·039 *higher* than the average of the preceding 25 years.

TEMPERATURE OF THE AIR.

The highest in the month was 73°·1 on the 28th; the lowest was 32°·6 on the 4th.
The range , , was 40°·5.
The mean , , of all the highest daily readings was 61°·4, being 3°·2 *lower* than the average of the preceding 25 years.
The mean , , of all the lowest daily readings was 40°·8, being 3°·5 *lower* than the average of the preceding 25 years.
The mean daily range was 20°·6, being 0°·3 *greater* than the average of the preceding 25 years.
The mean for the month was 50°·1, being 2°·9 *lower* than the average of the preceding 25 years.

ONTH and DAY, 1866.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Iay 1			10, oc.-r	10, ci.-s, cu.-s, sc, oc.-r : 10
2			10, sl.-r	7, glm,ci,ci.-cu: 4, ci.-cu, ci : 4, ci.-cu, ci.-s
3	o : ssN,ssP,g.-cur,sp	ssP, g.-cur, sp : o	10 : 10, cu.-s, ci.-s, h-shs, t	8, hl,v,cu.-s,cu: v : 4, th.-cl, h
4			5, ci, ci.-cu, h, v	8,ci.-cu,cu,ci.-s: 8,ci.-cu,cu,ci.-s: o, h
5			o : o : 4,ci,ci.-cu,ci.-s	8, ci.-cu, cu, li.-cl, r : v
6			v : 8, ci, ci.-cu, ci.-s, h, glm	10 : 10
7			8, ci, ci.-cu, h, glm	8, ci.-s, ci, h : o, ms
8			1, ci, h	6, li.-cl, h : v, th.-cl, h : 10, th.-cl
9			10, r	8,ci.-s,cu.-s,cu,ci.-cu: li.-cl : o
10			6, ci, ci.-cu, ci.-s, cu.-s	9, ci, ci.-cu, ci.-s, cu.-s : 3, ci, ci.-s
11			10. r : 10, c.-r : 10, c.-r, v	7,ci,ci.-s,cu.-s,v: v,ci.-cu,ci.-s,cu.-s,oc.-shs: 6,ci.-cu,ci.-s,cu.-s
12			10, r	10, r : v, ci.-s, r : v
13			o : 9, ci, ci.-cu, ci.-s, cu.-s	10 : 10
14			10	10, ci.-s, cu.-s, ci.-cu : 10, ci.-s, cu.-s
15			10, ci.-cu, ci.-s, cu.-s, glm	10, ci.-cu, ci.-s, cu.-s : 10, glm
16	o	o	7, ci, ci.-cu, ci.-s	10 : 7, ci, ci.-cu, ms
17	o	o	li.-cl, h.-d : 3, ci	4,ci,ci.-cu,ci.-s: 3,ci,ci.-cu,ci.-s: o, ms
18	o	o : w	o, h.-d : o	3, li.-cl, ci.-cu: o : o, d, ms
19	o	o : w : w	o, ms, h.-d : 1, ci	3, li.-cl, ci : o : o
20	w	o	o	o : o
21	w	wN : o : w	o	o : o
22	o	o	o	o : o
23	w	o : w : o	o	2,li.-cl,ci,ci.-cu: o : o, d
24	w	o	10, ci.-s, cu.-s, glm	9, ci.-s, ci.-cu : o, d
25	o	o	8, ci.-cu, cu.-s	5, ci,ci.-cu,li.-cl: v, ci, ci.-cu : 8,ci,ci.-cu,ci.-s
26	o	o : o : w	10, ci, ci.-cu, cu	4,ci,ci.-cu,cu,cu.-s,ci.-s,v: 10, sl.-r
27			10, h.-r : 10, glm	v,ci,ci.-cu,ci.-s,sl.-r: v : 6, ci, ci.-cu, ci.-s
28	o	o	o, h, li.-cl	7, ci, ci.-cu, cu, cu.-s : o, d
29	o	o	o	6,ci,ci.-cu,cu.-s,h,v: v : 10
30	o	o	5, ci, ci.-cu, h	8,ci,ci.-cu,ci.-s,cu.-s,h : 10, ci.-s, cu.-s : 10, ci.-s, cu.-s, sl.-r
31	w	o	10, ci.-s, cu.-s	10 : 10 : 10, h.-r

UMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 53°·0 on the 31st; and the lowest was 33°·4 on the 15th.

The mean ,, was 40°·8, being 4°·9 *lower* than the average of the preceding 25 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot255$, being $0^{\text{in}}\cdot049$ *less* than the average of the preceding 25 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{\text{grs}}\cdot9$, being $0^{\text{gr}}\cdot6$ *less* than the average of the preceding 25 years.

Degree of Humidity.—The mean for the month was 71 (that of Saturation being represented by 100), being 5 *less* than the average of the preceding 25 years.

Weight of a Cubic Foot of Air.—The mean for the month was 542 grains, being *the same as* the average of the preceding 25 years.

LOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·1.

ZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 1·0.

IND.

The proportions were of N. 6, S. 4, W. 6, E. 9, and Calm 6. The greatest pressure in the month was $10^{\text{lbs}}\cdot0$ on the square foot on the 11th.

AIN.

Fell on 8 days in the month, amounting to $1^{\text{in}}\cdot94$, as measured in the simple cylinder gauge partly sunk below the ground; being $0^{\text{in}}\cdot22$ *less* than the average fall of the preceding 51 years.

ECTRICITY.—The electrical apparatus was not in action on May 1 and 2, from May 4 to 15, and on May 27.

MONTH and DAY, 1866.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	WIND AS DEDUCED FROM ANEMOMETERS. OSLER'S. General Direction. A.M.	General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 21 Obs.	ROBINSON'S. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
June 1	..	29·529	68·2	49·4	56·4	51·7	144·0	48·0	58·8	57·7	4·7	14·2	1·0	— 0·6	E : SE	E by S	1·6	0·0	0·0	164	0·67
2	..	29·722	75·0	52·2	62·5	49·9	131·1	48·6	58·8	57·7	12·6	21·8	1·2	+ 5·2	SE : SW	SE : E by N	0·0	0·0	0·0	183	0·00
3	..	29·673	78·7	53·3	62·7	56·2	121·5	48·1	60·8	59·7	6·5	18·0	2·4	+ 5·3	E by N	E : Var.	1·6	0·0	0·1	161	0·00
4	..	29·689	71·6	54·6	60·4	56·6	126·5	50·0	61·1	60·0	3·8	7·7	0·2	+ 3·1	Variable	W : SW	0·5	0·0	0·0	258	1·34
5	..	29·750	64·4	51·4	55·3	49·4	114·2	49·7	61·8	61·8	5·9	12·6	1·6	— 1·9	SW : SSW	S : S by W	1·5	0·0	0·0	326	0·11
6	Last Qr.	29·912	64·7	51·3	55·4	49·7	106·8	50·0	62·3	61·7	5·7	13·1	1·6	— 1·6	SSW : SW	SW	0·0	0·0	0·0	232	0·04
7	In Equator	29·991	70·9	52·5	60·3	55·2	121·5	49·5	62·8	61·7	5·1	13·5	3·0	+ 3·3	SW	SW	0·0	0·0	0·0	202	0·01
8	..	30·083	77·8	52·8	64·8	55·5	150·5	47·4	63·3	62·2	9·3	21·3	2·6	+ 7·5	S : SW	SW	0·0	0·0	0·0	147	0·00
9	..	30·048	84·7	50·7	67·8	56·0	157·6	48·0	..	..	11·8	26·0	0·0	+10·1	SW	SW : S	0·0	0·0	0·0	132	0·00
10	..	29·892	83·8	54·6	68·5	58·6	145·0	50·0	64·8	62·7	9·9	20·6	4·4	+10·5	S : SW	SW : W	1·7	0·0	0·0	304	0·00
11	Perigee	29·866	72·1	48·2	59·0	49·6	143·1	42·4	65·8	63·7	9·4	17·7	1·0	+ 0·7	WSW	SW	0·0	0·0	0·0	276	0·00
12	New	29·475	63·4	52·6	56·8	52·1	92·8	47·9	65·8	63·7	4·7	6·7	3·8	— 1·8	SSW : SW	SW	0·6	0·0	0·0	361	0·00
13	Greatest Declination N.	29·631	63·2	49·8	53·4	50·0	100·9	43·0	64·8	62·7	3·4	10·1	0·6	— 5·4	SW : WSW	W : SW	0·0	0·0	0·0	174	0·10
14	..	29·826	70·8	48·0	57·7	51·4	140·5	38·9	63·2	62·2	6·3	15·7	0·6	— 1·3	WSW	W : WSW	0·0	0·0	0·0	245	0·00
15	..	29·768	66·1	47·6	56·3	54·4	101·0	40·0	62·5	61·8	1·9	8·1	0·0	— 2·7	WSW	SW : W by S	1·0	0·0	0·1	298	0·04
16	..	29·511	69·5	50·7	57·9	44·8	146·2	45·0	62·6	62·0	13·1	18·9	5·0	— 1·1	NW : W by S	WSW : SW	7·0	0·0	0·7	518	0·00
17	..	29·545	64·6	42·2	50·7	40·9	128·2	40·0	62·0	61·0	9·8	20·9	3·3	— 8·3	W : NW	NW : WSW	7·5	0·0	0·7	334	0·15
18	..	29·418	59·2	44·1	50·6	49·6	74·5	35·1	60·8	59·7	1·0	5·9	0·0	— 8·5	SW	SW	5·5	0·0	0·6	459	0·09
19	In Equator; First Quarter.	29·564	67·7	53·0	57·2	49·3	138·1	51·5	60·6	59·6	7·9	14·8	5·4	— 2·0	SW	WSW : W	10·0	0·0	0·8	371	0·01
20	..	29·896	69·8	45·2	56·4	52·4	121·9	37·1	58·8	58·7	4·0	13·7	2·2	— 3·1	SW	SW : S	1·3	0·0	0·1	232	0·01
21	..	29·729	79·2	56·9	66·7	57·3	153·4	53·1	61·3	59·7	9·4	19·7	3·6	+ 6·8	S : SW	SW	2·0	0·0	0·2	200	0·64
22	..	29·795	75·3	57·7	63·8	53·2	144·0	55·0	62·0	61·6	10·6	21·4	0·4	+ 3·5	NW : Calm : WSW	W	0·6	0·0	0·0	193	0·22
23	Apogee	29·990	75·8	49·3	61·2	55·1	145·5	48·0	63·8	62·7	6·1	18·2	0·2	+ 0·5	WSW : NE	ESE	0·0	0·0	0·0	167	0·00
24	..	30·036	72·7	52·6	62·3	50·8	149·0	49·0	64·4	63·7	11·5	19·3	1·4	+ 1·1	E : NE	E : ESE	1·6	0·0	0·1	203	0·00
25	..	29·942	76·1	48·6	61·2	58·6	144·7	48·4	64·8	62·7	2·6	12·6	0·0	— 0·4	NE	NE : Calm	0·0	0·0	0·0	177	0·00
26	..	29·886	80·1	54·5	67·7	56·1	156·0	51·1	65·8	63·7	11·6	22·6	0·0	+ 6·0	NNE : NE	E by N : NE	2·2	0·0	0·3	220	0·00
27	Greatest Declination S.	29·766	86·5	56·1	69·6	60·7	162·9	53·5	66·8	64·7	8·9	22·0	1·7	+ 8·0	NNE : NE	ESE : Calm	2·0	0·0	0·1	146	0·00
28	Full	29·808	83·0	61·7	69·7	59·9	118·0	56·9	67·9	65·9	9·8	22·3	0·0	+ 8·2	Calm	Variable	0·5	0·0	0·0	174	0·06
29	..	29·822	77·3	59·5	65·1	59·3	116·9	..	68·0	66·7	5·8	13·9	1·5	+ 3·7	Calm : N	NNE	0·0	0·0	0·0	110	0·00
30	..	29·648	83·3	57·8	68·4	61·4	149·4	51·4	68·3	67·0	7·0	17·3	0·2	+ 7·3	Calm : WSW	SW : WSW	3·5	0·0	0·2	300	0·1
Means	..	29·774	73·2	52·0	60·9	53·5	131·5	47·5	63·3	62·0	7·3	16·4	1·6	+ 1·7	...	...	..	..	..	Sum 7267	Sum 3·64

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29$^{\text{in}}$·734 on the 2nd; the first minimum in the month was 29$^{\text{in}}$·511 on the 1st.
The absolute maximum ,, was 30$^{\text{in}}$·107 on the 8th; the second minimum ,, was 29$^{\text{in}}$·660 on the 3rd.
The third maximum ,, was 29$^{\text{in}}$·935 on the 11th; the third minimum ,, was 29$^{\text{in}}$·884 on the 10th.
The fourth maximum ,, was 29$^{\text{in}}$·849 on the 14th; the fourth minimum ,, was 29$^{\text{in}}$·431 on the 12th.
The fifth maximum ,, was 29$^{\text{in}}$·629 on the 17th; the absolute minimum ,, was 29$^{\text{in}}$·350 on the 16th.
The sixth maximum ,, was 29$^{\text{in}}$·921 on the 20th; the sixth minimum ,, was 29$^{\text{in}}$·370 on the 18th.
The seventh maximum ,, was 30$^{\text{in}}$·054 on the 24th; the seventh minimum ,, was 29$^{\text{in}}$·701 on the 21st.
The eighth maximum ,, was 29$^{\text{in}}$·842 on the 29th; the eighth minimum ,, was 29$^{\text{in}}$·735 on the 27th.
The range in the month was 0$^{\text{in}}$·757.
The mean for the month was 29$^{\text{in}}$·774, being 0$^{\text{in}}$·023 *lower* than the average of the preceding 25 years.

TEMPERATURE OF THE AIR.

The highest in the month was 86°·5 on the 27th; the lowest was 42°·2 on the 17th.
The range ,, was 44°·3.
The mean ,, of all the highest daily readings was 73°·2, being 2°·2 *higher* than the average of the preceding 25 years.
The mean ,, of all the lowest daily readings was 52°·0, being 1°·9 *higher* than the average of the preceding 25 years.
The mean daily range was 21°·2, being 0°·4 *greater* than the average of the preceding 25 years.
The mean for the month was 60°·9, being 1°·9 *higher* than the average of the preceding 25 years.

MONTH and DAY, 1866.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
June 1	o	o : wN : m	10, c.-h.-r : 10 : 10, cu-s, ci.-cu	10, cu.-s, ci.-s, r: v, d : 10, ci.-s, cu.-s
2	w	w : o	1, ci	6, ci, ci.-cu, cu, cu.-s : o
3	w	w : m	10, ci.-s, s, glm	10, ci.-s, s, glm : 5, ci, ci.-cu, ci.-s, l
4	o	o : w : o	h.-r : 5, ci, ci.-cu, oc.-shs	10, sl.-r : 10, cu.-s, ci.-s, sc, r
5			c.-r : 10 : 10	9, cu.-s, ci.-cu, cu, oc.-r : 10, th.-r
6	o	o : w	th.-r : 10, th.-r	9,ci.-cu,ci.-s,cu.-s,oc.-shs : v, h.-cl : 7, li.-cl, ci.-s
7	w	w	10	8, ci, ci.-s, ci.-cu : 4, ci
8	w	o	2, ci, ci.-s, v	7, ci, ci.-cu, cu : v, ci, ci.-s
9	w	o	o 3, ci	5, ci, ci.-cu, cu : 10, th.-cl, ci.-s
10	w	o	6, ci, ci.-s	1, ci, ci.-cu : v, ci, ci.-cu, cu.-s, ci.-s
11	o	o : w	8, ci.-cu, ci, h	7,ci,ci.-cu,cu.-s: v :8, th.-cl,ci.-s,cu.-s
12	o	o : w	10, sc	10, sl.-r, sc : v : 10
13	o : o : ssN,sp,g.-cur	ssN, sp, g.-cur : o	10, sc, oc.-shs	10, r : 10, cu.-s, ci.-cu, ci
14	o	o : w	7, ci.-cu, h	9, ci.-cu : 4, ci, ci.-cu, ci.-s, sl.-r
15	o	o	10	10, ci.-s : 10, th.-r
16	o	o	10 : 6, ci.-cu, ci	7, ci, ci.-cu : v : l, m
17			r : 10, cu.-s, ci.-s	vv, oc.-shs : vv, oc.-shs
18			10, r	10, sc, sl.-r : 10, sl.-r
19			7, ci, ci.-s, sc, oc.-shs, v	v, oc.-r, w : v
20			o : 10	10, ci.-s,cu.-s, ci.-cu,glm : 10, ci.-s
21			8, ci, ci.-cu	5, ci, ci.-s : v : 9,cu.-s,ci.-s,t.-s,h.-r,m
22			c.-h.-r : oc.-r : 7, ci, ci.-cu, h	5, ci, ci.-cu, h : 4, ci, ci.-cu : o
23	o : w	o : o : w	o : 1, ci	3, ci, ci.-cu : o : o, h
24	w	o	o	o : o, m
25	o	o	10, li.-cl, ci.-s, glm	10, ci.-cu, ci, ci.-s : o, d
26	w	w : o : o	o, ci	1, ci.-cu : o
27	o	o	7, ci, ci.-cu	7, ci,ci.-s,ci.-cu : 6, ci, ci.-cu :7,ci,ci.-cu,cu.-s,l,sl.-r
28	o	w : o	oc.-r : 8, ci, ci.-cu, h	8,ci,ci.-cu,h,cu,cu.-s,t,l : v, t, l, ci, ci.-cu, cu.-s, cu : o
29	o	o	10, ci.-s, glm	9,ci.-s,cu.-s,ci.-cu,li.-cl,v: 10, ci.-s, cu.-s
30	o	ssN,sp,g.-cur : o : o	2, ci, ci.-cu, h, v	6,ci.-cu,cu,cu.-s,t : v, h.-shs, t : 10, h.-r

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 64°·6 on the 28th and 30th; and the lowest was 39°·8 on the 17th.

The mean ,, was 53°·5, being 2°·8 *higher* than the average of the preceding 25 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot410$, being $0^{\text{in}}\cdot038$ *greater* than the average of the preceding 25 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $4^{\text{gr}}\cdot6$, being $0^{\text{gr}}\cdot4$ *greater* than the average of the preceding 25 years.

Degree of Humidity.—The mean for the month was 77 (that of Saturation being represented by 100), being 3 *greater* than the average of the preceding 25 years.

Weight of a Cubic Foot of Air.—The mean for the month was 529 grains, being 2 grains *less* than the average of the preceding 25 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by o and a cloudy sky by 10, was 6·9.

OZONE.

The mean amount for the month, on a scale ranging from o to 10, was 1·1.

WIND.

The proportions were of N. 3, S. 9, W. 11, E. 5, and Calm 2. The greatest pressure in the month was $10^{\text{lbs}}\cdot0$ on the square foot on the 19th.

RAIN.

Fell on 15 days in the month, amounting to $3^{\text{in}}\cdot64$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{\text{in}}\cdot68$ *greater* than the average fall of the preceding 51 years.

ELECTRICITY.—June 17 to 22. The electrical apparatus was not in action.

MONTH and DAY, 1866.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers.						Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M.						Osler's.					Robinson's.	
															General Direction.		Pressure in lbs. on the square foot.				
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.	Amount of Horizontal Movement of the Air on each Day.	
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles	in.
July 1	..	29·365	70·3	54·6	57·6	52·1	135·9	54·6	67·8	66·7	5·5	14·9	0·0	− 3·3	WSW	WSW	2·8	0·0	0·3	367	0·35
2	..	29·235	67·8	50·2	57·6	48·4	129·1	42·6	66·8	65·7	9·2	14·4	4·2	− 3·5	SW : WSW	SW : WSW	1·5	0·0	0·1	362	0·02
3	..	29·207	64·6	49·7	54·7	51·4	127·2	43·1	67·1	66·7	3·3	13·3	0·0	− 6·6	WSW	WSW : SW	4·5	0·0	0·3	290	0·43
4	In Equator	29·337	67·3	50·8	54·9	52·1	123·6	50·8	65·8	64·7	2·8	8·8	0·0	− 6·6	WNW : W : WSW	WSW : SW	4·0	0·0	0·2	413	0·07
5	Last Quarter	29·369	69·0	50·4	57·1	49·5	147·2	49·7	65·3	64·2	7·6	15·1	1·0	− 4·6	SW : WSW	WSW	6·7	0·0	0·2	200	0·27
6	..	29·495	68·6	50·1	56·6	50·7	135·7	47·8	64·8	63·7	5·9	15·8	0·0	− 5·2	WSW : SW : NNW	WSW : Var.	1·8	0·0	0·0	238	0·04
7	..	29·862	67·1	46·4	55·7	47·6	135·0	38·9	65·3	64·2	8·1	18·2	1·3	− 6·2	WNW : W	W : WSW	1·0	0·0	0·1	279	0·00
8	..	29·998	66·8	48·7	57·6	54·4	84·7	39·1	64·1	63·2	3·2	8·8	0·0	− 4·1	WSW	WSW	0·6	0·0	0·0	373	0·00
9	Perigee	30·041	79·2	57·9	66·1	60·2	147·0	56·0	63·8	63·7	5·9	13·8	2·1	+ 4·4	WSW : W	W	1·0	0·0	0·1	338	0·00
10	Greatest Declination N.	30·141	82·7	58·9	70·6	60·4	142·0	53·4	64·8	64·7	10·2	20·2	1·1	+ 8·8	WSW	W : NW	1·0	0·0	0·1	160	0·00
11	..	30·143	82·0	56·9	69·4	60·0	152·0	51·3	65·8	65·2	9·4	19·0	0·3	+ 7·6	Calm : NE	NE : SE	0·0	0·0	0·0	88	0·00
12	New	30·029	86·2	55·4	70·8	62·2	152·9	54·2	66·8	63·7	8·6	22·4	0·8	+ 8·8	Calm : SE	SSE : ESE	0·0	0·0	0·0	120	0·00
13	..	29·926	87·2	59·1	73·4	63·9	163·5	58·5	67·8	66·7	9·5	21·3	1·0	+ 11·1	SE : SW	WSW : W	0·5	0·0	0·0	170	0·00
14	..	29·985	82·2	58·8	69·7	62·4	139·4	58·0	68·8	68·2	7·3	17·9	0·0	+ 7·2	Calm : NNE	SW : NE	0·0	0·0	0·0	71	0·00
15	..	29·992	83·3	58·5	69·5	61·9	132·0	54·6	70·3	68·7	7·6	16·7	0·0	+ 7·0	Calm : NE	NE : E	3·0	0·0	0·3	162	0·00
16	..	29·945	75·8	56·9	64·0	56·6	139·7	51·0	68·8	67·7	7·4	16·7	1·3	+ 1·6	ENE	ENE : E	0·0	0·0	0·0	293	0·00
17	In Equator	29·884	71·9	59·0	63·3	53·4	118·4	57·0	68·3	67·5	9·9	14·6	4·6	+ 1·1	ENE	ENE : ESE : E	0·7	0·0	0·0	202	0·00
18	..	29·829	75·0	47·2	60·5	50·8	150·0	44·2	67·8	66·7	9·7	22·8	1·3	− 1·4	NE	NE : E	1·3	0·0	0·0	157	0·00
19	First Quarter.	29·764	72·3	50·4	59·5	52·3	131·2	47·8	68·3	67·2	7·2	14·1	3·6	− 2·1	Calm : N	NE : NNE	1·2	0·0	0·0	232	0·00
20	..	29·910	67·6	48·0	56·2	48·0	120·0	45·0	66·3	65·4	8·2	16·0	3·8	− 5·2	N by W	N : Calm	1·5	0·0	0·1	125	0·00
21	Apogee	29·934	78·0	47·2	62·2	55·7	120·0	39·1	66·8	65·7	6·5	21·3	0·0	+ 0·7	Calm	NW : ENE	1·0	0·0	0·0	164	0·00
22	..	29·973	70·7	52·2	59·3	50·3	139·0	45·8	66·3	65·7	9·0	17·5	3·4	− 2·2	NE	NE	0·0	0·0	0·0	148	0·00
23	..	29·864	72·2	46·5	57·7	48·5	148·7	44·8	..	..	9·2	22·0	1·0	− 3·9	NE : NNE	NNW : N	1·5	0·0	0·1	243	0·00
24	Greatest Declination S.	29·907	67·2	54·2	59·4	48·3	110·6	48·3	65·8	64·7	11·1	16·5	5·8	− 2·3	NNW	NNW	2·1	0·0	0·3	270	0·00
25	..	30·067	67·2	53·2	58·3	50·9	102·8	52·5	64·8	64·2	7·4	14·2	5·0	− 3·5	N by W	NNW	1·1	0·0	0·1	142	0·00
26	..	29·950	74·4	49·1	60·4	53·1	133·0	..	65·3	64·7	7·3	17·7	0·8	− 1·5	Calm : SW	SW : SSW	0·5	0·0	0·0	176	0·00
27	Full	29·630	64·9	55·2	59·0	57·9	75·0	51·7	64·8	63·7	1·1	6·8	0·0	− 3·0	Calm	SSW : S	0·4	0·0	0·0	130	0·09
28	..	29·504	68·4	54·2	61·2	57·1	117·0	52·8	63·8	63·7	4·1	9·0	0·0	− 1·0	Calm : NE	ENE : E	0·3	0·0	0·0	203	0·00
29	..	29·426	71·5	54·0	60·2	53·9	119·2	52·8	63·3	63·2	6·3	14·0	0·0	− 2·1	SE : SW : W	W : WNW	5·0	0·0	1·0	439	0·21
30	..	29·643	70·2	49·1	58·2	47·3	129·4	44·2	62·8	62·7	10·9	20·2	2·7	− 4·2	WNW : NW	W : WNW	3·0	0·0	0·8	309	0·00
31	In Equator.	29·526	58·8	46·0	51·3	50·4	77·2	42·0	63·8	..	0·9	5·2	0·2	− 11·1	W : SW	WSW : NW : N by W	5·8	0·0	1·2	368	0·14
Means	..	29·770	72·6	52·5	61·0	53·9	128·3	49·1	66·1	65·3	7·1	15·8	1·5	− 0·8	...	...	..	..	..	Sum 7232	Sum 1·62

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The absolute minimum in the month was $29^{\text{in}}\cdot 123$ on the 3rd.

The first maximum in the month was $29^{\text{in}}\cdot 393$ on the 4th ; the second minimum .. was $29^{\text{in}}\cdot 338$ on the 5th.

The absolute maximum ,, was $30^{\text{in}}\cdot 174$ on the 11th ; the third minimum ,, was $29^{\text{in}}\cdot 916$ on the 13th.

The third maximum ,, was $30^{\text{in}}\cdot 006$ on the 15th ; the fourth minimum .. was $29^{\text{in}}\cdot 745$ on the 19th.

The fourth maximum ,, was $30^{\text{in}}\cdot 001$ on the 22nd ; the fifth minimum .. was $29^{\text{in}}\cdot 844$ on the 23rd.

The fifth maximum .. was $30^{\text{in}}\cdot 088$ on the 25th ; the sixth minimum .. was $29^{\text{in}}\cdot 575$ on the 29th.

The sixth maximum ,, was $29^{\text{in}}\cdot 655$ on the 30th ; the seventh minimum ,, was $29^{\text{in}}\cdot 476$ on the 31st.

The range in the month was $1^{\text{in}}\cdot 051$.

The mean for the month was $29^{\text{in}}\cdot 770$, being $0^{\text{in}}\cdot 033$ *lower* than the average of the preceding 25 years.

TEMPERATURE OF THE AIR.

The highest in the month was 87°·2 on the 13th ; the lowest was 46°·0 on the 31st.

The range ,, was 41°·2.

The mean ,, of all the highest daily readings was 72°·6, being 1°·2 *lower* than the average of the preceding 25 years.

The mean ,, of all the lowest daily readings was 52°·5, being 0°·4 *lower* than the average of the preceding 25 years.

The mean daily range was 20°·1, being 0°·8 *less* than the average of the preceding 25 years.

The mean for the month was 61°·0, being 0°·7 *lower* than the average of the preceding 25 years.

MONTH and DAY, 1866.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
July 1	m N	o : w	h.-r : 10, oc.-r : 10, h.-r, li.-cl	9, ci.-cu, cu, r : v : 2, ci.-s, ci, l
2	o	o	6, ci, ci.-cu, cu, cu.-s, sl.-r	10,r,ci.-cu,cu.-s : v,ci.-cu,cu,cu.-s : 4,ci,ci.-cu,ci.-s
3	o : ss N, ss P, g.-cur, sp		8, ci, ci.-cu, cu.-s, oc.-shs	10, ci, ci.-cu, sc, h.-r : 10, r
4			10, oc.-shs	v, oc.-shs : v, oc.-shs : 3, ci.-cu, ci.-s
5		ssN,g.-cur,sp. : o	h.-r : 7, ci.-cu, cu.-s, r	9,ci.-cu,cu.-s,cu,ci,oc-shs : 10, glm
6	o : ssN, g.-cur, sp	v : ssP,g.-cur,sp	10, cu, cu.-s, oc.-shs, t	10,ci.-cu,cu,ci,h,l,t : 10,cu.-s,n,t,l : 10, t, sl.-r
7	o	o	9, ci.-cu, h	6, ci.-cu, cu.-s, h : 3, ci, ci.-s
8	o	o	10, th.-r, glm	10, glm, sc : 10, sc, glm
9	o		10, th.-r : 10, ci.-s, cu.-s, v	7, ci, ci.-s, ci.-cu : o
10			o, m	4,li.-cl,ci,ci.-cu,cu,h : v, li.-cl : o
11			1, ci	6, ci, ci.-cu, h : v, ci, ci.-cu, h : 8,ci,ci.-cu,ci.-s
12			o	5, ci.-cu : o, m
13	o	o	h.-d : o	1, ci, ci.-cu : li.-cl, ci
14	o	w : o : w	8, ci, h	8,ci,ci.-s,ci.-cu,cu.-s,h : v : o, d
15	w	o	3, ci, h	8, ci.-cu, cu, ci.-s, h, th.-cl : th.-cl, h
16	w		7, ci, ci.-s, ci.-cu	6, ci, ci.-cu, cu : v : 3, ci, d
17			10, ci, ci.-cu, ci.-s	10, ci.-cu, ci.-s : 10, ci.-s, ms
18		w	o, ms : 7, ci.-cu, ci, h	6, ci.-cu, ci : o
19	o	o	2, ci.-cu, ci, h	10,ci,ci.-cu,ci.-s,h : th.-cl : o, h.-d, ms
20	o	w : o	10	9, ci, ci.-cu, ci.-s : o : 4,ci,ci.-cu,cu.-s,h,h.-d,ms
21	w	o	o, h.-d, h, ms : o, h	o, h : o, h : 2, ci.-cu, cu.-s
22	o	o	9, ci.-cu, ci.-s	6, ci, ci.-cu : o
23	o	o	10, ci.-s, glm, ci	3, ci : th.-cl : 8, ci, ci.-cu
24	w	o : w : o	10	10, ci.-cu : 10
25	w	w	10, sl.-r	10, ci.-s, ci.-cu : 10
26	o	o	7, ci, ci.-cu, cu, h	10 : 10, ci.-s, ci.-cu, sl.-r
27	o	o : w	10, oc.-r	10, ci.-cu, oc.-r : 10 : 10, ci.-cu, s
28	w	o : w : w	10, ci.-cu, li.-cl	10, ci.-cu, ci.-s : 10
29	o : s N	o	r : 10, sc, shs.-r	v,ci.-cu,cu.-s,ci.-s : v : o, h.-d. ms
30			o, ms : 8, ci, ci.-cu, ci.-s	7, ci, ci.-cu, cu.-s, ci.-s : 8, ci, ci.-cu, ci.-s, cu.-s, m
31			10, r	9,c.-r,ci,ci.-cu,ci.-s : 10, oc.-r : 10, oc.-r

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 67°·8 on the 13th; and the lowest was 46°·4 on the 20th.

The mean „ was 53°·9, being 0°·2 *higher* than the average of the preceding 25 years.

Elastic Force of Vapour.—The mean for the month was 0^{in}·416, being 0^{in}·003 *greater* than the average of the preceding 25 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 4^{gr}·7, being 0^{gr}·1 *greater* than the average of the preceding 25 years.

Degree of Humidity.—The mean for the month was 78 (that of Saturation being represented by 100), being 2 *greater* than the average of the preceding 25 years.

Weight of a Cubic Foot of Air.—The mean for the month was 528 grains, being *the same as* the average of the preceding 25 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·0.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·9.

WIND.

The proportions were of N. 6, S. 4, W. 11, E. 6, and Calm 4. The greatest pressure in the month was 6^{lbs}·7 on the square foot on the 5th.

RAIN.

Fell on 9 days in the month, amounting to 1^{in}·62, as measured in the simple cylinder gauge partly sunk below the ground; being 0^{in}·97 *less* than the average fall of the preceding 51 years.

ELECTRICITY. The insulating lamp was not burning from July 3 to 5, 10 to 12, 16 to 18, and on 30 and 31.

MONTH and DAY, 1866.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Readings of Thermometers. Dry. Lowest.	Readings of Thermometers. Dry. Mean Daily Value.	Readings of Thermometers. Dew Point. Mean Daily Value.	Highest in the Sun's Rays by a Self-Registering Thermometer with blackened bulb, in vacuo, above the Grass.	Lowest on the Grass as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference between the Dew Point Temperature and Air Temperature. Greatest.	Difference between the Dew Point Temperature and Air Temperature. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	Wind as deduced from Anemometers. Osler's. General Direction. P.M.	Osler's. Pressure in lbs. on the square foot. Greatest.	Osler's. Pressure in lbs. on the square foot. Least.	Osler's. Pressure in lbs. on the square foot. Mean of 21 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Aug. 1	..	29·720	69·8	51·7	57·8	51·0	121·8	49·0	62·3	60·7	6·8	14·0	2·8	— 4·6	N by W	SW : W	1·7	0·0	0·3	221	0·01
2	..	29·421	72·8	56·1	63·7	60·2	108·8	53·5	62·3	61·7	3·5	9·4	0·0	+ 1·3	W	NW	1·9	0·0	0·3	315	0·15
3	Last Qr.	29·607	72·9	54·6	61·4	55·4	116·1	52·4	61·8	61·7	6·0	10·1	3·8	— 1·0	WNW	W : WNW	3·4	0·0	1·1	436	0·00
4	..	29·552	69·8	50·4	58·8	46·3	137·0	49·8	61·8	61·7	12·5	21·6	2·8	— 3·5	W	WNW : W	8·1	0·3	2·4	471	0·00
5	Perigee	29·613	68·3	50·3	57·1	46·7	130·7	42·4	60·7	59·0	10·4	21·1	3·2	— 5·1	W : WNW	NW : W	2·9	0·0	0·6	331	0·00
6	..	29·537	61·0	49·3	55·2	52·4	83·4	44·1	61·1	60·4	2·8	11·0	0·0	— 6·9	W : WSW	SW : SSW	5·0	0·0	1·1	462	0·21
7	Greatest Declination N	29·322	70·0	55·5	60·6	51·4	130·2	54·5	60·8	59·3	9·2	17·3	3·4	— 1·4	SSW	SSW	10·8	0·2	2·4	505	0·15
8	..	29·509	68·2	50·4	59·6	50·3	123·8	43·6	60·5	58·2	9·3	16·6	1·8	— 2·4	SSW	SSW	6·0	0·2	1·7	414	0·07
9	..	29·430	68·0	51·1	58·6	47·7	130·0	45·3	60·8	60·2	10·9	19·6	1·8	— 3·5	SW : WSW	WSW	2·0	0·0	0·8	283	0·14
10	New	29·586	63·5	48·2	55·5	49·2	115·5	41·4	60·3	59·7	6·3	15·0	2·2	— 6·6	WSW : WNW : NNW	NW : W	2·0	0·0	0·2	255	0·02
11	..	29·927	69·3	48·2	57·5	49·5	116·5	41·5	60·7	60·2	8·0	18·9	2·7	— 4·6	NW : N	NW : W : WSW	1·5	0·0	0·1	187	0·00
12	..	29·552	68·5	51·2	58·8	55·4	123·6	49·7	60·8	59·7	3·4	12·4	1·0	— 3·2	SE : NE	N : SSE : SW	1·4	0·0	0·0	113	0·26
13	In Equator	29·767	71·0	55·5	61·4	52·7	128·0	54·1	61·8	60·7	8·7	15·7	1·8	— 0·5	NE	SE	0·4	0·0	0·0	250	0·07
14	..	29·634	66·8	55·5	58·9	54·1	86·0	52·1	62·8	61·2	4·8	12·1	0·6	— 2·8	SSW	NW	6·0	0·0	0·5	196	0·20
15	..	29·797	65·3	53·9	57·7	49·2	95·9	47·9	60·8	60·7	8·5	11·9	3·4	— 3·8	WNW	W	2·0	0·0	0·2	211	0·00
16	..	29·566	63·0	51·6	55·1	48·2	89·0	47·8	61·3	61·0	6·9	10·5	2·9	— 6·2	WSW	WSW : W by N	7·6	0·0	1·1	423	0·09
17	..	29·642	66·7	49·4	56·2	46·3	111·0	42·4	61·3	59·7	9·9	18·0	3·9	— 4·9	WSW	W	7·0	0·0	1·7	280	0·00
18	First Quarter Apogee	29·800	72·2	46·9	57·7	48·7	138·0	41·1	60·5	59·6	9·0	20·1	0·6	— 3·3	WSW	SW : S	0·7	0·0	0·1	173	0·00
19	..	29·662	73·2	45·0	60·7	53·1	132·8	42·0	60·1	58·9	7·6	20·1	1·1	— 0·2	Calm : SE	SE : ENE	1·4	0·0	0·1	129	0·00
20	..	29·561	72·5	54·8	61·6	58·3	119·5	54·8	60·8	59·7	3·3	11·6	1·2	+ 0·8	N	NE	0·0	0·0	0·0	102	0·10
21	Greatest Declination S	29·690	68·9	53·5	59·8	56·7	102·0	51·9	60·6	59·4	3·1	9·9	0·0	— 0·9	N : NNW	NNW	0·8	0·0	0·0	186	0·16
22	..	29·844	67·0	56·7	60·4	56·1	87·4	54·8	61·3	59·7	4·3	9·4	1·3	— 0·3	NNW : N	Calm	0·1	0·0	0·0	69	0·00
23	..	29·879	74·3	50·5	60·2	57·6	122·2	48·2	61·8	61·7	2·6	11·0	0·0	— 0·4	Calm	E	1·5	0·0	0·1	167	0·00
24	..	29·866	73·4	56·6	63·4	59·6	94·9	51·5	62·8	62·4	3·8	9·0	0·0	+ 2·9	E : Calm	WSW : S	0·3	0·0	0·0	136	0·05
25	..	29·919	73·2	52·6	62·3	57·9	129·0	44·5	63·0	62·7	4·4	12·1	0·0	+ 1·8	SW	SW : S by E	0·3	0·0	0·0	154	0·01
26	Full	29·830	78·5	55·4	66·0	56·3	155·9	55·2	63·8	63·7	9·7	19·4	0·0	+ 5·7	SSE : SW	SSW	1·8	0·0	0·2	255	0·01
27	..	29·673	74·2	57·7	64·3	54·5	133·8	54·0	64·1	63·9	9·8	18·5	2·5	+ 4·2	SW	SW	3·5	0·0	0·3	234	0·00
28	In Equator	29·371	69·9	55·1	60·7	54·5	110·5	48·4	64·3	64·1	6·2	14·4	1·9	+ 0·8	S : SE	SE : Calm	1·1	0·0	0·1	121	0·00
29	..	29·169	59·0	53·8	55·0	53·8	74·2	48·8	64·8	64·7	1·2	2·2	0·2	— 4·7	Calm : SW	NW : WSW : W	8·0	0·0	0·4	361	0·60
30	Perigee	29·593	67·3	52·5	58·1	48·8	121·4	50·8	63·8	63·7	9·3	13·8	2·4	— 1·3	NW	SW	6·0	0·0	0·8	213	0·12
31	..	29·724	70·8	46·9	58·2	50·3	129·5	41·4	62·8	62·3	7·9	16·4	1·5	— 1·0	SW	SW : S by W	0·2	0·0	0·0	227	0·00
Means	..	29·638	69·4	52·3	59·4	52·7	115·8	48·4	61·8	61·2	6·3	14·4	1·7	— 1·8	...	...	..	..	..	Sum 7860	Sum 2·42

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29^{in}·706 on the 1st; the first minimum in the month was 29^{in}·380 on the 2nd.
The second maximum .. was 29^{in}·642 on the 3rd; the second minimum ,, was 29^{in}·538 on the 4th.
The third maximum .. was 29^{in}·656 on the 5th; the third minimum .. was 29^{in}·288 on the 7th.
The fourth maximum .. was 29^{in}·563 on the 8th; the fourth minimum .. was 29^{in}·403 on the 9th.
The absolute maximum .. was 29^{in}·961 on the 11th; the fifth minimum ,, was 29^{in}·552 on the 12th.
The sixth maximum .. was 29^{in}·791 on the 13th; the sixth minimum .. was 29^{in}·610 on the 14th.
The seventh maximum .. was 29^{in}·806 on the 15th; the seventh minimum ,, was 29^{in}·508 on the 16th.
The eighth maximum .. was 29^{in}·825 on the 18th; the eighth minimum .. was 29^{in}·546 on the 20th.
The ninth maximum .. was 29^{in}·898 on the 23rd; the ninth minimum .. was 29^{in}·840 on the 24th.
The tenth maximum .. was 29^{in}·941 on the 25th; the absolute minimum ,, was 29^{in}·157 on the 29th.
The range in the month was 0^{in}·804.
The mean for the month was 29^{in}·638, being 0^{in}·153 *lower* than the average of the preceding 25 years.

TEMPERATURE OF THE AIR.

The highest in the month was 78°·5 on the 26th; the lowest was 45°·0 on the 19th.
The range ,, was 33°·5.
The mean ,, of all the highest daily readings was 69°·4, being 3°·4 *lower* than the average of the preceding 25 years.
The mean ,, of all the lowest daily readings was 52°·3, being 0°·8 *lower* than the average of the preceding 25 years.
The mean daily range was 17°·1, being 2°·6 *less* than the average of the preceding 25 years.
The mean for the month was 59°·4, being 1°·8 *lower* than the average of the preceding 25 years.

MONTH and DAY, 1866.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
August 1			10, sl, r : 10, gt.-glm	7, cu, ci.-cu, ci : 10, ci.-cu
2			10, ci.-s, oc.-r	10,cu.-s,n,ci.-s,li.-cl,h.-r,v: 10, li.-cl, ci
3			10, cu.-s, ci.-s	10,li.-cl,ci.-s,cu,s: v, sl.-r :6,ci.-s,cu.-s,ci,ms
4			o, ms : o : 10, sc, li.-cl, v	7.ci,ci.-cu,ci.-s: v : o, ms
5			10, sl.-r, glm	6, ci, ci.-s, ci.-cu, cu.-s : 3, ci, ci.-cu, cu.-s, ms
6			10, ci.-s, cu.-s	10, oc.-r, sc : 10, th.-r : 10, th.-r
7			r : 8, ci, ci.-cu, cu.-s, sc	8, cu, ci.-cu, n, r : 2, ci.-s, ms
8			o, ms : 8, li.-cl, ci.-cu, sl.-r	v, sl.-r : sl.-r : 10, h.-r, v
9			r : 7, ci.-cu, cu, h, v	6,ci,ci.-s,cu.-s,ci.-cu : vv : 1, ci, ci.-s, ms
10		ssN,sP,g.-cur.sp: o	li.-cl, ms : 7, ci, ci.-cu, ci.-s, h	6,ci,ci.-cu,ci.-s,oc.-shs: v :v,r,ci,ci.-cu,ci.-s,cu.-s
11	o	o	v, l : 9, ci.-cu, h	9, ci.-cu, h : 9, ci.-cu, ci.-s
12	o	w	r : 10, cu, cu.-s	9,ci,ci.-cu,cu.-s,glm: glm : 10, sl.-r, glm
13	o	o : w	oc.-shs : 7, cu, ci.-cu, ci.-s,	9,ci,ci.-s,cu.-s,ci.-cu: 10, ci.-cu, cu.-s, ci.-s: 10
14	o	o : o : w	h.-r : 10, th.-r	10,ci.-s,ci.-cu,h : vv, w : o
15	w	o	10, ci, ci.-cu, ci.-s,	10 : 10
16	o	o	10	9,oc.-shs,ci,ci.-cu,ci.-s, w:v, w : o, l, w
17	w	w : o	5, ci, ci.-cu, cu.-s, ci.-s, w	9,ci,ci.-s,cu.-s,ci.-cu,v,w:v,sl.-r : 3, ci, ci.-s
18	o	o	2, ci, ci.-cu, cu, h	7,ci,ci.-cu,cu,cu.-s,h: ci.-cu : o
19	o	o	li.-cl : 8, ci, ci.-cu	8, ci, ci.-cu : 8, ci, ci.-s, ci.-cu, cu.-s
20	o	o	10, f, glm, r	8,th.-cl,ci,ci.-cu,ci.-s,sl.-f: 10, h : 10, ci.-s, cu.-s, h, r
21	o	o	c.-r : 10, ci.-cu, h : 10, ci.-cu, h	9, ci.-cu, h : ci.-cu : o
22	o	o	10, ci.-s, h	10, ci.-cu, cu.-s, ci.-s : ci, h, d
23	o	o : w : o	h.-d : 10, h	5, ci, ci.-cu, cu.-s, ci.-s : 10, ci, ci.-s, li.-cl
24			ci, d : 10, ci, ci.-s, ci.-cu, h, r	10, sc, th.-r : 10 : ci, d, lu.-co
25			d : 10, ci, ci.-s, h	10, ci, ci.-cu, h, sl.-r : 9, ci, ci.-cu, d
26			2, ci, f, sl.-r	7,ci,ci.-s,ci.-cu: 4, ci : 10, ci, l
27	w	w	9, cu, ci.-cu, cu.-s	9,ci.-cu,ci,ci.-s,sl.-r: li.-cl : 1, ci.-s
28	w	o	10, ci, ci.-cu, ci.-s	10,ci.-s,cu.-s,ci.-cu,r,glm : 10, ci.-s, cu.-s : ci.-cu, cu.-s
29	w :sP,g.-cur,sp	o	10, h.-r	10, r : 9, cu.-s, ci.-cu, s, sc
30	o	o	10, r : 6, li.-cl, cu.-s, ci.-cu, ci	9,ci,ci.-cu,ci.-s: 10, sl.-r : 10, th.-cl, cu.-s
31	w	o	d : 1, ci, ci.-s, h	7,ci,ci.-s,cu.-s,ci.-cu: 4, ci, ci.-cu, ci.-s : o

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 63°·2 on the 2nd; and the lowest was [illegible] on the 10th

The mean ,, was 52°·7, being 1°·1 *lower* than the average of the preceding 25 years.

Elastic Force of Vapour.—The mean for the month was 0in·[illegible]

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 4grs·[illegible]

Degree of Humidity.—The mean for the month was [illegible] (that of Saturation being represented by 100), [illegible] the preceding 25 years.

Weight of a Cubic Foot of Air.—The mean for the month was 528 grains, [illegible] than the average of the preceding 25 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·7.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 1·1

WIND.

The proportions were of N. 5, S. 8, W. 13, E. [illegible], and Calm 3. The greatest pressure in the month was 10lbs [illegible] on the square foot on the [illegible].

RAIN.

Fell on 18 days in the month, amounting to 2in·42, as measured in the simple cylinder gauge partly sunk below the ground; being 0in·02 *greater* than the average fall of the preceding 51 years.

ELECTRICITY.—The insulating lamp was not burning from August 1 to 9, and 24 to 26.

MONTH and DAY, 1866.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value	Greatest.	Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	P.M.	Pressure in lbs. on the square foot. Greatest.	Least.	Mean of 24 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Sept. 1	..	29·729	70·7	52·2	59·1	51·6	131·6	44·7	63·3	62·2	7·5	16·9	3·0	+ 0·1	S by W : SW	SW : SSW	4·6	0·0	0·5	351	0·00
2	Last Qr.	29·387	65·6	48·8	54·5	50·5	123·0	45·5	62·4	62·4	4·0	8·4	1·2	— 4·2	SSW : SW	WSW	8·4	0·0	0·8	366	0·90
3	Greatest Declination N	29·701	66·3	45·8	55·6	47·2	130·0	38·8	59·8	58·7	8·4	16·7	2·3	— 2·8	WSW : W	W : SW	8·2	0·0	1·1	312	0·00
4	..	29·476	68·5	52·8	59·7	58·9	83·0	47·0	..	..	0·8	7·0	0·0	+ 1·5	SW. SSE : SSW	SW	3·4	0·0	0·6	378	0·24
5	..	29·281	69·3	58·8	61·7	56·2	122·5	54·6	60·8	60·2	5·5	11·3	0·0	+ 3·7	SW : SSW	SW	20·0	0·5	3·0	389	0·14
6	..	29·432	68·2	55·1	60·0	54·7	106·1	48·3	62·0	61·6	5·3	11·3	2·5	+ 2·1	SW : SSW	S : SSW	15·8	0·2	1·5	464	0·18
7	..	29·457	69·3	54·8	60·4	55·1	114·8	53·3	60·8	60·7	5·3	11·0	2·1	+ 2·6	SW : WSW	SW	20·0	0·0	2·8	178	0·00
8	..	29·550	60·9	55·7	57·4	53·8	78·8	54·9	60·8	60·6	3·6	6·1	0·6	— 0·4	Calm : NE	NNE : N	0·2	0·0	0·0	88	0·45
9	New	29·582	67·2	53·2	58·5	53·2	118·0	48·4	60·8	60·7	5·3	9·4	0·2	+ 0·8	Variable	S : SSE	1·1	0·0	0·1	221	0·17
10	In Equator	29·392	70·2	54·8	59·9	52·8	125·3	52·9	61·7	60·9	7·1	12·2	2·0	+ 2·2	S : SW	SW	3·2	0·0	0·6	319	0·03
11	..	29·424	63·6	52·3	56·2	49·2	121·1	48·0	60·8	60·4	7·0	13·7	0·2	— 1·4	SW : SSW	WSW : W	22·0	0·2	2·6	410	0·15
12	..	29·750	59·9	49·7	52·8	47·3	88·1	43·5	59·8	59·7	5·5	10·6	0·6	— 4·7	W : WNW	SW : SSE : SSW	3·6	0·0	0·5	214	0·01
13	..	29·642	64·9	52·4	57·3	50·6	101·2	50·7	59·8	58·4	6·7	11·2	3·2	0·0	SW : W	WSW : SSW	2·4	0·0	0·4	271	0·00
14	..	29·405	64·6	52·0	56·1	48·0	112·0	52·0	59·0	58·7	8·1	14·4	2·2	— 1·1	S : SW	SW	20·0	0·1	2·3	308	0·44
15	Apogee	29·568	67·2	47·4	56·1	49·6	135·0	43·9	59·3	58·6	6·5	14·4	2·2	— 1·0	SW	SW	8·1	0·0	0·6	289	0·07
16	..	29·237	63·2	47·0	53·1	49·2	124·5	41·5	58·3	56·7	3·9	8·5	1·3	— 3·8	SW	S : SW	12·5	0·0	1·0	307	0·16
17	First Quarter Greatest Dec S	29·602	64·8	46·9	53·5	46·0	111·6	..	57·8	56·7	7·5	15·8	1·9	— 3·2	W : WNW	NW : WSW	2·6	0·0	0·4	161	0·03
18	..	29·890	64·0	42·4	53·9	50·0	112·0	39·7	58·3	57·3	3·9	12·4	0·4	— 2·6	SW	SSW	10·8	0·0	0·5	342	0·00
19	..	29·795	66·9	53·5	58·0	51·9	118·9	50·4	57·8	57·7	6·1	10·3	0·6	+ 1·8	SW	SW	10·0	0·1	1·0	273	0·02
20	..	29·770	60·8	48·5	54·8	49·3	96·0	41·4	58·1	56·9	5·5	10·1	2·3	— 1·2	SW	SW	10·2	0·1	1·1	350	0·00
21	..	29·465	64·3	49·6	53·9	46·3	119·8	48·7	56·8	56·2	7·6	14·9	2·2	— 1·9	SW : WSW	WSW : SW	14·3	0·1	1·4	269	0·19
22	..	29·144	55·0	46·2	49·0	46·7	69·0	46·2	56·6	56·4	2·3	6·4	0·0	— 6·5	SW : SE : NE	NW : SW : S	1·7	0·0	0·1	164	0·49
23	..	29·276	59·8	45·0	51·2	48·4	91·2	..	56·4	..	2·8	7·6	0·0	— 4·0	Calm	ESE : SE	0·1	0·0	0·0	110	0·00
24	In Equator Full	29·588	63·8	47·9	53·7	49·3	123·7	40·0	55·8	54·7	4·4	11·8	0·8	— 1·3	SE	SW	2·4	0·0	0·3	216	0·02
25	..	29·837	64·3	41·3	53·4	46·6	126·8	33·1	55·8	55·7	6·8	17·5	0·5	— 1·4	S	S by W : SSE	1·6	0·0	0·3	216	0·00
26	..	29·797	62·0	51·7	56·3	55·9	78·5	51·7	55·8	54·7	0·4	1·7	0·0	+ 1·7	SSE : S	SW	0·5	0·0	0·0	106	0·05
27	Perigee	29·787	62·8	50·0	54·4	51·0	79·2	42·2	56·0	54·7	3·4	9·3	0·0	0·0	SE	Calm	0·0	0·0	0·0	57	0·16
28	..	29·654	71·0	48·9	58·1	57·4	114·0	42·3	54·8	53·6	0·7	6·5	0·0	+ 3·9	Calm : E	E : Calm	0·7	0·0	0·1	123	0·00
29	..	29·749	67·8	55·9	61·2	58·0	95·2	48·0	54·5	53·7	3·2	7·4	0·2	+ 7·1	S : Calm	Calm	0·3	0·0	0·0	66	0·00
30	Greatest Declination N	29·878	67·1	57·3	61·0	60·0	74·0	54·2	55·8	54·7	1·0	3·6	0·0	+ 7·0	NE	N : W by S : N	0·5	0·0	0·0	199	0·00
Means	..	29·575	65·1	50·6	56·4	51·5	107·5	46·6	58·6	58·0	4·9	10·6	1·1	— 0·2	...	...	..	..	..	Sum 7517	Sum 3·90

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29^{in}·757 on the 1st; the first minimum in the month was 29^{in}·361 on the 2nd.
The second maximum .. was 29^{in}·735 on the 3rd; the second minimum ,, was 29^{in}·215 on the 5th.
The third maximum ,, was 29^{in}·523 on the 6th; the third minimum ,, was 29^{in}·280 on the 6th.
The fourth maximum .. was 29^{in}·661 on the 9th; the fourth minimum ,, was 29^{in}·350 on the 10th.
The fifth maximum .. was 29^{in}·483 on the 10th; the fifth minimum ,, was 29^{in}·372 on the 11th.
The sixth maximum .. was 29^{in}·794 on the 12th; the sixth minimum ,, was 29^{in}·332 on the 14th.
The seventh maximum ,, was 29^{in}·596 on the 15th; the seventh minimum ,, was 29^{in}·048 on the 16th.
The eighth maximum ,, was 29^{in}·935 on the 18th; the eighth minimum ,, was 29^{in}·785 on the 19th.
The ninth maximum .. was 29^{in}·868 on the 20th; the absolute minimum ,, was 29^{in}·034 on the 22nd.
The tenth maximum .. was 29^{in}·868 on the 25th; the tenth minimum .. was 29^{in}·612 on the 28th.
The absolute maximum .. was 29^{in}·953 on the 30th.
The range in the month was 0^{in}·919.
The mean for the month was 29^{in}·575, being 0^{in}·253 *lower* than the average of the preceding 25 years.

TEMPERATURE OF THE AIR.

The highest in the month was 71°·0 on the 28th; the lowest was 41°·3 on the 25th.
The range .. was 29°·7.
The mean .. of all the highest daily readings was 65°·1, being 2°·6 *lower* than the average of the preceding 25 years.
The mean .. of all the lowest daily readings was 50°·6, being 1°·6 *higher* than the average of the preceding 25 years.
The mean daily range was 14°·5, being 4°·2 *less* than the average of the preceding 25 years.
The mean for the month was 56°·4, being 0°·7 *lower* than the average of the preceding 25 years.

MONTH and DAY, 1866.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Sept. 1	o	o	6, ci.-cu, cu, cu.-s, sl.-r	9, ci.-cu, cu, cu.-s, ci, sl.-r : v, s
2	o	o : w	o : 10, h.-r, w	v, ci.-s, cu.-s, oc.-r, t : vv, oc.-r, sq, l
3			1, ci, ci.-cu	v, ci, ci.-cu, cu : v, th.-cl, h
4			v : 10, r : 10, ci.-s, sc, sl.-r	10, oc.-r, ci.-s, sc : oc.-r : 10, sl.-r
5			10, ci.-s, sc, r, st.-w	5, ci.-cu, cu, cu. s, sc, st.-w, ci : o, w
6			v, oc.-r	10, ci.-s, cu.-s, ci.-cu, sc, oc.-r, w : 10, oc.-r, st.-w, vv
7			st.-w : 10, ci.-cu, cu.-s, sc	9, li.-cl, ci.-cu, cu.-s, ci.-s : 10, glm, ci.-s, cu.-s
8	o	o	10, ci.-s	10, h.-r : 10, h.-r : 10. li.-shs
9	o	o	10 : 7, ci, ci.-cu, cu, h, v	10, ci.-cu, ci.-s, cu.-s : 10 : 10, h.-r
10	w	sP, sN, sp, g.-cur : o	10, oc.-r, v	v, ci, ci.-cu, cu, ci.-s, cu.-s, oc.-r : v, li.-cl, ci
11			10, sc, h.-r, w	v, ci.-s, cu.-s, st.-w, oc.-r : v, ci.-s, cu.-s, st.-w : 10, sl.-r
12			10, th.-cl	10, th.-cl, ci.-s, cu.-s, sl.-r : 10, th.-r
13			10	9, ci.-cu, cu.-s : 10
14			h.-r : c.-h.-r : 8, ci, ci.-s, sc, w	7, cu.-s, ci.-cu, cu, sc, sl.-r, w : v : o
15		ssN, sp, g.-cur : o	2, ci, ci.-cu, cu	vv, oc.-h.-shs : oc.-shs : 7, ci.-s
16			10, sc, sl.-r	10, oc.-r : v, oc.-r : 10
17			h.-d, sl.-r : 5, ci, ci.-cu, h	8, ci.-cu, cu, cu.-s : li.-cl, cu.-s : o, h.-d
18		o : w : o	2, ci, h.-d, v	9, ci, ci.-cu, cu, ci.-s, h : 10, th.-cl, sl.-r : 10, th.-cl, sl.-r
19	o	o	sl.-r, d : 10, li.-cl, ci, h, d	10, ci.-cu, cu, cu.-s, sc : 1, ci, ci.-s
20	o	o	o : 10, th.-cl, ci, ci.-cu, ci.-s	10, th.-cl, ci, ci.-cu, ci.-s : v, sl.-r : 10, sl.-r, w
21			10, w, r : sl.-r, li.-cl : 8, ci, ci.-cu, h	8, ci.-cu, cu, cu.-s, ci : vv, li.-shs : v, lu.-co, h
22			th.-r : r : 10, th.-r	9, th.-cl., cu.-s : 10, th.-cl
23			h.-d : 10, li.-cl, h	9, li.-cl : li.-cl, sl.-r : 10, ci.-s, cu.-s
24			10, th.-r, ci.-s, cu.-s, li.-cl	7, ci.-s, ci.-cu, cu.-s, oc.-shs : v, ci.-cu : o
25		w : o	o, d : o, h.-d	o : 7, ci, ci.-s
26	o	o	10, sl.-r	10, oc.-r, ci.-s : 10, oc.-r
27	o	w	10, r : 10	8, f, li.-cl, h : v, sl.-f, d, th.-cl, h
28	o	w : o	10	5, cu, cu.-s, ci.-s, ci, h : 7, ci, th.-cl, s, f : 9, ci.-cu, ci.-s, f, d
29	w	o	d : 10	8, ci, ci.-cu, ci.-s : 10
30	o	o	10	10 : 10, sl.-f

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 62°·3 on the 30th; and the lowest was 45°·0 on the 12th.

The mean ,, was 51°·5, being 0°·4 *higher* than the average of the preceding 25 years.

Elastic Force of Vapour.—The mean for the month was $0^{\text{in}}\cdot 381$, being *the same as* the average of the preceding 25 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $4^{\text{grs}}\cdot 3$, being $0^{\text{gr}}\cdot 1$ *greater* than the average of the preceding 25 years.

Degree of Humidity.—The mean for the month was 84 (that of Saturation being represented by 100), being 3 *greater* than the average of the preceding 25 years.

Weight of a Cubic Foot of Air.—The mean for the month was 530 grains, being 4 grains *less* than the average of the preceding 25 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·8.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 1·8.

WIND.

The proportions were of N. 2, S. 13, W. 11, E. 2, and Calm 2. The greatest pressure in the month was $22^{\text{lbs}}\cdot 0$ on the square foot on the 11th.

RAIN.

Fell on 19 days in the month, amounting to $3^{\text{in}}\cdot 90$, as measured in the simple cylinder gauge partly sunk below the ground; being $1^{\text{in}}\cdot 50$ *greater* than the average fall of the preceding 51 years.

ELECTRICITY.—The insulating lamp was not burning from September 3 to 7, 11 to 17, and 21 to 24.

MONTH and DAY, 1866.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	READINGS OF THERMOMETERS. Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer, with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M.		Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	WIND AS DEDUCED FROM ANEMOMETERS. OSLER'S. General Direction.		Pressure in lbs. on the square foot.			ROBINSON'S. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches above the Ground.
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.		
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Oct. 1	Last Qr.	29·913	60·2	53·4	56·1	54·3	79·6	52·0	56·8	56·7	1·8	3·8	0·4	+ 2·2	N : NNE	N	0·7	0·0	0·1	208	0·00
2	..	29·842	62·6	53·7	56·9	56·5	71·2	52·9	58·7	57·7	0·4	3·6	0·0	+ 3·1	N	NE : Calm	0·0	0·0	0·0	51	0·00
3	..	29·914	68·1	57·2	61·8	57·8	110·0	54·3	58·7	58·7	4·0	10·1	0·4	+ 8·1	Calm	NE : E	0·0	0·0	0·0	108	0·00
4	..	29·952	61·6	55·6	57·5	56·8	74·5	54·2	59·3	58·7	0·7	2·7	0·2	+ 4·0	NNE	Calm	0·0	0·0	0·0	99	0·00
5	..	30·140	56·8	54·1	55·0	53·1	61·9	54·1	59·3	59·1	1·9	3·2	0·4	+ 1·7	N	N : NNE	0·3	0·0	0·0	196	0·00
6	..	30·305	62·8	53·6	56·7	54·9	77·1	52·5	57·8	57·2	1·8	5·1	0·4	+ 3·8	NE	N : E	0·5	0·0	0·0	124	0·02
7	In Equator	30·307	61·8	50·4	55·0	53·1	93·1	44·6	59·1	58·2	1·9	4·4	0·0	+ 2·5	Calm : NE	NE	0·2	0·0	0·0	166	0·00
8	New	30·203	66·0	50·1	56·4	51·5	116·8	45·3	59·1	58·0	4·9	13·1	0·0	+ 4·3	NE	E : ENE	1·6	0·0	0·1	170	0·00
9	..	30·049	59·2	49·1	53·8	49·4	85·1	43·0	58·0	57·7	4·4	8·9	0·6	+ 2·0	NE	NE	2·6	0·0	0·3	211	0·00
10	..	29·894	60·2	49·6	53·6	48·1	89·8	43·7	57·8	57·0	5·5	9·9	2·5	+ 2·0	NE	NE	1·5	0·0	0·2	286	0·00
11	..	29·886	56·4	46·7	51·7	47·0	74·1	39·3	56·8	55·7	4·7	8·6	2·7	+ 0·3	ENE	ENE	1·8	0·0	0·1	184	0·00
12	Apogee	29·838	59·2	42·6	50·4	46·6	111·8	36·9	56·4	55·7	3·8	11·2	0·0	— 0·8	Calm : ENE	E	0·3	0·0	0·0	122	0·00
13	..	29·770	55·9	35·6	45·9	44·7	78·8	35·1	55·8	54·7	1·2	8·4	0·0	— 5·0	SW	SW	0·0	0·0	0·0	112	0·00
14	Greatest Declination S.	29·807	54·6	44·8	48·4	45·5	75·0	41·9	55·8	54·7	2·9	6·0	1·5	— 2·2	SW	N : NE	1·8	0·0	0·0	169	0·01
15	..	30·009	54·0	34·0	44·3	38·4	94·2	31·2	54·8	53·9	5·9	13·2	1·4	— 6·0	N	NNW	0·1	0·0	0·0	112	0·00
16	First Quarter	30·052	54·6	33·0	43·9	38·2	101·7	24·8	54·8	52·7	5·7	12·8	1·5	— 6·1	SW : Calm	NE : ESE	0·1	0·0	0·0	161	0·00
17	..	29·884	56·3	40·8	48·2	40·9	110·4	32·1	53·8	52·2	7·3	16·4	3·5	— 1·6	ESE	E	3·6	0·0	0·5	243	0·00
18	..	29·730	52·9	44·8	49·0	49·0	54·0	38·2	52·8	51·7	0·0	1·0	0·0	— 0·6	E	SE	1·0	0·0	0·2	208	0·73
19	..	29·910	63·5	52·6	57·5	57·2	79·5	50·2	51·8	51·6	0·3	3·4	0·0	+ 8·2	SE : S	SSE : S	0·4	0·0	0·0	130	0·03
20	..	30·030	62·2	52·3	56·0	55·8	73·2	45·1	52·8	51·7	0·2	2·3	0·0	+ 6·9	Calm	E	0·4	0·0	0·0	147	0·02
21	In Equator	29·859	65·1	53·1	56·9	53·3	101·0	52·6	53·8	52·7	3·6	8·4	0·6	+ 8·0	SE	SSE	0·5	0·0	0·0	156	0·07
22	..	29·703	59·8	41·4	50·7	50·6	66·0	32·0	53·8	51·7	0·1	1·7	0·0	+ 2·0	SSE	SW : WNW : WSW	2·8	0·0	0·1	228	0·19
23	..	29·985	58·9	40·5	50·5	48·6	78·4	32·2	54·3	52·7	1·6	4·8	0·0	+ 2·0	SW	SW : SSW	0·3	0·0	0·0	196	0·00
24	Full	29·708	60·8	48·2	52·4	46·6	94·2	47·0	54·5	53·7	5·8	10·1	0·8	+ 4·2	SSW	SSW : SSE	2·6	0·0	0·2	202	0·00
25	Perigee.	29·518	50·9	43·3	44·6	43·4	61·0	41·6	53·4	52·7	1·2	2·9	0·0	— 3·3	SW : SE	N	0·6	0·0	0·0	208	0·87
26	..	29·773	54·0	40·7	45·9	41·4	66·0	32·2	52·8	..	4·5	9·8	2·1	— 1·7	NE	N	0·6	0·0	0·0	140	0·03
27	Greatest Declination N	29·854	52·3	31·0	42·6	39·1	82·0	25·1	51·8	..	3·5	12·2	0·0	— 4·7	Calm : SW	SW : S	0·0	0·0	0·0	166	0·00
28	..	29·981	54·8	44·0	48·6	42·0	94·5	40·0	54·8	54·7	6·6	12·2	0·4	+ 1·6	SW : WSW : NNW	NNW	5·3	0·0	0·7	309	0·05
29	..	30·193	51·5	33·7	43·6	39·6	94·4	26·5	54·1	52·7	4·0	9·2	0·0	— 3·2	WSW	SW	1·5	0·0	0·2	306	0·03
30	Last Quarter	29·686	55·6	46·6	51·0	49·0	62·0	41·8	53·8	49·7	2·0	8·0	0·8	+ 4·4	SW	WSW : WNW	22·5	0·0	1·9	310	0·04
31	..	29·951	51·9	39·8	43·9	40·1	81·0	34·6	53·8	47·7	3·8	11·0	1·2	— 2·6	WNW : WSW	SW	0·6	0·0	0·0	250	0·00
Means	..	29·927	58·2	45·7	51·3	48·2	84·6	41·3	55·5	54·5	3·1	7·7	0·7	+ 1·1	...	...	..	..	..	Sum 5768	Sum 2·09

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The absolute maximum in the month was 30^{in}·344 on the 7th; the first minimum in the month was 29^{in}·834 on the 2nd.
The second maximum .. was 30^{in}·078 on the 16th; the second minimum .. was 29^{in}·752 on the 13th.
The third maximum .. was 30^{in}·078 on the 20th; the third minimum .. was 29^{in}·723 on the 18th.
The fourth maximum .. was 30^{in}·017 on the 23rd; the fourth minimum .. was 29^{in}·747 on the 22nd.
The fifth maximum .. was 30^{in}·250 on the 29th; the absolute minimum .. was 29^{in}·510 on the 25th.
The sixth maximum .. was 29^{in}·984 on the 31st; the sixth minimum .. was 29^{in}·624 on the 30th.
The range in the month was 0^{in}·834.
The mean for the month was 29^{in}·927, being 0^{in}·241 *higher* than the average of the preceding 25 years.

TEMPERATURE OF THE AIR.

The highest in the month was 68°·1 on the 3rd; the lowest was 31°·0 on the 27th.
The range .. was 37°·1.
The mean ,, of all the highest daily readings was 58°·2, being 0°·5 *lower* than the average of the preceding 25 years.
The mean .. of all the lowest daily readings was 45°·7, being 1°·0 *higher* than the average of the preceding 25 years.
The mean daily range was 12°·5, being 2°·1 *less* than the average of the preceding 25 years.
The mean for the month was 51°·3, being 0°·8 *higher* than the average of the preceding 25 years.

MONTH and DAY, 1866.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
October 1	o	o	10, ci.-s, cu.-s,ci, ci.-cu	10 : 10
2	o	o	10 : 10, m.-r, f	10, sl.-f : 10 : 10, m.-r
3	o	o	10 : 10 : 5, h	v, li.-cl, ci, h : 10, li.-cl
4	o	o	10, ci.-s, m.-r	10, ci.-s : 10
5	o	o : w : o	10, m.-r	10, h : 10, m.-r
6	o	o : w : o	10, m.-r	9,ci.-s,ci.-cu,cu.-s: v : 10
7	w	w : o	6, ci, ci.-cu, cu.-s, h	v : v, th.-cl, h.-d, sl.-f, m
8	w	o	10	o : o, m :10,th.-cl,ci,ci.-cu,d
9	w	w	9, ci, ci.-cu, ci.-s, cu.-s	9, cu.-s, ci.-cu : v : 10
10	o	w : o	10	9, ci.-cu, ci, ci.-s : 8, ci.-cu, th.-cl
11	o	o	10, ci.-cu, cu.-s	10, cu.-s, ci.-s : li.-cl : 4, li.-cl, ci.-cu
12	w	w : o	o, h.-d : 9, ci.-cu, cu.-s	4, ci.-cu, cu.-s : o, m
13	o	w : o	o, sl.-f, d : 8, ci, ci.-cu, cu.-s, f, h	5, th.-cl, cu.-s, ci.-s, ci.-cu, h: 10, f, h
14	o	o	10, sl.-r : 10, f	v, ci, ci.-cu, ci.-s, th.-cl: v, li.-cl, ci
15	w	w : o : w	o, d : o, h	3, li.-cl : li.-cl : o, d, sl.-f
16	w	o : w	h.-d, h.-fr : o, h, sl.-f	o, h : o, h : 3, ci, ci.-s
17	o	o : w : w	d : o	3, ci, ci.-s : v, ci, ci.-s : 9, ci, ci.-s, ci.-cu
18	o	o : w	10 : 10, sl.-r : 10, h.-r	10, c.-h.-r : 10, r : 10, h.-r
19	o	ssP,sp,g.-cur: o : o	10, m.-r : 10	10, ci.-s, cu.-s, ci.-cu, ci, r: 9, ci, ci.-cu, cu.-s, ci.-s
20	o	w : o	10, f	10 : 10, r, ci.-s, glm
21	o	o	10, s, ci.-s	10, ci.-s, s, ci.-cu, oc.-r : v, ci, s, ci.-s
22	o :ssP,wN,g.-cur	o	10, h.-r	10, c.-h.-r : 5, oc.-r : o, h.-d, h
23	o	o	10, ci, ci.-cu, ci.-s	10, ci, ci.-cu, ci.-s : 10, ci, ci.-cu, ci.-s
24	o	o : o : w	2, ci	7, ci.-cu, cu.-s, ci.-s, ci : 7, ci.-s, ci.-cu, h
25	wN	o : w	10, h.-r : 10, c.-h.-r :10,ci.-s,oc.-r,gt.-glm	10, glm, sl.-r : 10, glm, oc.-r
26			4, ci, h	4,ci.-cu,cu,cu.-s,ci,h: ci, ci.-cu, h :4,ci,h,d,lu.-ha,sl.-f
27			o, ci, h, f	6, ci, ci.-cu, h: 10, sl.-r : 10
28			10, oc.-r, w	2, ci, ci.-s : o, m
29			o, h.-fr : 6, ci, h	10, ci.-s, cu.-s : 10
30			10, ci.-s, sc, ci, s, w, th.-r	10, sc, w : 10, sc : o
31			4, th.-cl, h, f, glm	4, sl.-f, h, th.-cl : o, d, m

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 59°·7 on the 3rd; and the lowest was 37°·2 on the 15th.

The mean ,, was 48°·2, being 1°·8 *higher* than the average of the preceding 25 years.

Elastic Force of Vapour.—The mean for the month was 0in·338, being 0in·022 *greater* than the average of the preceding 25 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was 3grs·8, being 0grs·1 *greater* than the average of the preceding 25 years.

Degree of Humidity.—The mean for the month was 90 (that of Saturation being represented by 100), being 3 *greater* than the average of the preceding 25 years.

Weight of a Cubic Foot of Air.—The mean for the month was 542 grains, being 4 grains *greater* than the average of the preceding 25 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·3.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·7.

WIND.

The proportions were of N. 9, S. 6, W. 5, E. 8, and Calm 3. The greatest pressure in the month was 22lbs·5 on the square foot on the 7th.

RAIN.

Fell on 10 days in the month, amounting to 2in·09, as measured in the simple cylinder gauge partly sunk below the ground; being 0in·73 less than the average fall of the preceding 51 years.

ELECTRICITY.—From October 26 to 31 the electrical apparatus was not in action.

MONTH and DAY, 1866.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32° Fahrenheit).	Readings of Thermometers. Dry. Highest.	Dry. Lowest.	Dry. Mean Daily Value.	Dew Point. Mean Daily Value.	Highest in the Sun, as shewn by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass.	Lowest on the Grass, as shewn by a Self-Registering Minimum Thermometer.	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9h A.M. Highest.	In the Water of the Thames. Lowest.	Difference between the Dew Point Temperature and Air Temperature. Mean Daily Value.	Difference. Greatest.	Difference. Least.	Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	Wind as deduced from Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure in lbs. on the square foot. Greatest.	Pressure. Least.	Pressure. Mean of 24 Obs.	Robinson's. Amount of Horizontal Movement of the Air on each Day.	Rain in Inches, collected in a Gauge whose receiving surface is 5 inches
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Nov. 1	.	29·799	56·1	44·4	51·2	47·7	66·0	36·2	51·8	45·7	3·5	7·8	1·8	+ 4·8	WSW	SW : S	1·1	0·0	0·2	187	0·0
2	..	29·649	59·2	49·8	54·4	51·7	70·6	46·9	53·8	45·7	2·7	6·5	0·4	+ 8·1	S	SSW	0·7	0·0	0·0	254	0·0
3	In Equator	29·598	58·5	45·3	51·5	50·2	68·0	37·6	52·8	46·7	1·6	4·7	0·0	+ 5·7	SSW	SSW : WSW	3·3	0·0	0·4	274	0·0
4	..	29·833	54·4	39·5	47·7	44·1	95·0	31·0	51·8	46·7	3·6	8·8	0·0	+ 1·8	SW	SW	3·0	0·0	0·3	370	0·0
5	..	29·767	59·6	47·8	53·9	50·6	79·0	41·4	50·8	47·7	3·3	8·5	0·0	+ 8·2	SW	SW	9·7	0·1	1·1	418	0·0
6	..	29·935	58·0	45·8	51·3	45·6	100·0	39·0	50·7	48·7	5·7	10·3	1·3	+ 5·8	WSW	WSW : SW	3·1	0·0	0·5	378	0·0
7	New.	29·900	56·4	45·4	51·4	47·9	71·0	39·0	50·3	47·2	3·5	6·8	0·2	+ 6·1	SW	SW	8·6	0·0	1·0	395	0·0
8	..	29·651	58·4	48·7	52·4	49·7	93·0	46·4	49·9	48·7	2·7	6·3	0·4	+ 7·4	SW	SW : WSW	11·0	0·0	1·2	437	0·
9	Apogee	29·750	50·4	36·7	42·5	36·7	85·5	31·1	49·9	48·2	5·8	11·1	1·2	— 2·2	WSW : W	W : SW	4·7	0·0	0·4	233	0·0
10	..	29·971	49·4	30·6	39·4	36·9	67·8	22·7	49·3	48·7	2·5	9·2	0·0	— 5·0	SW : Calm	S	3·0	0·0	0·1	353	0·0
11	Greatest Declination S.	29·657	57·1	42·0	49·4	43·4	74·8	41·3	49·8	48·7	6·0	10·6	2·6	+ 5·3	S : SW : W	W : WSW	18·0	0·0	1·0	281	0·2
12	..	29·719	56·2	38·6	48·9	46·4	64·3	28·9	49·3	48·7	2·5	7·6	0·5	+ 5·1	WSW : SW	SSW : S : SW	9·6	0·0	0·6	497	0·0
13	..	29·462	58·5	42·8	50·4	46·4	58·5	36·2	49·0	47·2	4·0	11·2	0·8	+ 6·9	WSW	W : WSW	13·0	0·0	2·6	485	0·2
14	..	29·837	48·7	38·8	43·1	35·0	68·1	31·2	48·6	45·7	8·1	11·8	3·5	— 0·1	WSW	WNW : W	18·0	0·0	1·5	361	0·0
15	First Qr.	29·855	49·4	33·7	43·3	38·0	65·3	28·1	47·8	45·7	5·3	11·8	3·4	+ 0·4	WSW	SSW : SW	3·2	0·0	0·3	442	0·
16	..	29·197	56·3	41·6	49·1	46·9	61·2	40·0	48·3	44·7	2·2	4·6	1·5	+ 6·5	SW	WSW, W : N	22·0	0·4	2·4	542	0·0
17	..	30·091	39·8	30·8	34·8	25·4	66·0	23·2	46·8	44·9	9·4	14·6	4·0	— 7·5	N by W	NNW : SW : SSW	5·7	0·0	0·6	334	0·
18	In Equator	29·639	50·6	31·2	43·4	42·4	54·5	23·2	45·3	43·7	1·0	8·1	0·0	+ 1·4	SSW : SW	SW : NW	8·8	0·0	1·2	403	0·
19	..	29·787	41·0	31·7	34·6	23·0	56·2	24·0	43·8	42·7	11·6	12·5	10·7	— 7·2	NW : N	NNW	3·7	0·0	1·0	377	0·0
20	..	30·013	37·8	29·4	32·9	23·5	50·0	22·0	42·3	40·7	9·4	12·2	6·2	— 8·7	NNW	NW	2·2	0·0	0·2	256	0·0
21	..	29·943	43·9	26·5	36·1	33·8	54·0	21·1	38·8	38·7	2·3	6·4	0·5	— 5·3	WSW	WNW : WSW	1·5	0·0	0·1	210	0·0
22	Full : Perigee	30·042	45·3	34·1	41·3	39·4	49·0	26·4	39·8	38·7	1·9	7·0	0·3	+ 0·1	WSW	W : WSW	0·2	0·0	0·0	214	0·
23	..	29·640	48·8	41·2	45·1	41·7	55·0	37·2	40·8	38·2	3·4	5·1	1·2	+ 4·0	SW	WSW : W : NW	10·0	0·0	0·7	428	0·
24	Greatest Declination N.	29·759	45·9	35·7	41·2	36·9	57·7	35·2	41·7	38·7	4·3	7·3	0·0	— 3·2	WNW	SW : SSW	1·8	0·0	0·5	357	0·0
25	..	29·355	48·5	39·2	43·4	37·9	67·0	33·5	41·8	39·2	5·5	9·9	1·5	+ 2·5	WSW	W	7·0	0·2	1·3	408	0·
26	..	29·764	47·1	35·2	41·7	35·9	54·5	30·2	41·8	39·7	5·8	9·9	2·6	+ 0·8	WNW : NW	NNW : W by S	7·0	0·0	0·4	369	0·
27	..	29·807	49·3	41·5	44·7	37·2	55·0	33·8	42·3	39·7	7·5	10·5	5·1	+ 3·6	W : NW	NNW	8·8	0·0	1·1	287	0·0
28	..	30·106	40·5	30·8	34·5	32·8	44·0	25·8	42·8	39·8	1·7	3·2	0·9	— 6·8	NNW : WSW : SW	SW	0·4	0·0	0·0	115	0·
29	Last Qr.	30·109	48·3	30·2	39·4	35·8	53·6	23·7	43·3	39·7	3·6	9·7	0·0	— 2·2	SW : S : Calm	SE	0·2	0·0	0·0	139	0·0
30	In Equator	29·904	40·9	30·3	34·9	29·4	61·4	27·0	42·9	38·7	5·5	8·5	1·6	— 7·0	SE	ESE : ENE	1·1	0·0	0·1	179	0·
Means	..	29·786	50·5	38·0	44·3	39·7	65·4	32·1	46·6	43·9	4·6	8·7	1·7	+ 1·1	...	...	..	..	..	9990	1·

BAROMETER READINGS FROM EYE-OBSERVATIONS.

The first maximum in the month was 29$^{\text{in}}$·855 on the 4th; the first minimum in the month was 29$^{\text{in}}$·549 on the 3rd.
The second maximum .. was 30$^{\text{in}}$·018 on the 6th; the second minimum .. was 29$^{\text{in}}$·744 on the 5th.
The third maximum ,, was 30$^{\text{in}}$·050 on the 10th; the third minimum .. was 29$^{\text{in}}$·561 on the 8th.
The fourth maximum .. was 29$^{\text{in}}$·853 on the 12th; the fourth minimum .. was 29$^{\text{in}}$·536 on the 11th.
The fifth maximum ,, was 30$^{\text{in}}$·008 on the 15th; the fifth minimum .. was 29$^{\text{in}}$·393 on the 13th.
The absolute maximum ,, was 30$^{\text{in}}$·169 on the 17th; the absolute minimum .. was 29$^{\text{in}}$·053 on the 16th.
The seventh maximum ,, was 30$^{\text{in}}$·032 on the 20th; the seventh minimum .. was 29$^{\text{in}}$·595 on the 18th.
The eighth maximum ,, was 30$^{\text{in}}$·067 on the 22nd; the eighth minimum .. was 29$^{\text{in}}$·926 on the 21st.
The ninth maximum ,, was 29$^{\text{in}}$·797 on the 24th; the ninth minimum ., was 29$^{\text{in}}$·726 on the 23rd.
The tenth maximum ,, was 29$^{\text{in}}$·842 on the 26th; the tenth minimum .. was 29$^{\text{in}}$·323 on the 25th.
The eleventh maximum ,, was 30$^{\text{in}}$·144 on the 28th; the eleventh minimum ., was 29$^{\text{in}}$·732 on the 27th.
The range in the month was 1$^{\text{in}}$·116.
The mean for the month was 29$^{\text{in}}$·786, being 0$^{\text{in}}$·038 *higher* than the average of the preceding 25 years.

TEMPERATURE OF THE AIR.

The highest in the month was 59°·6 on the 5th; the lowest was 26°·5 on the 21st.
The range ,, was 33°·1.
The mean ,, of all the highest daily readings was 50°·5, being 1°·3 *higher* than the average of the preceding 25 years.
The mean ,, of all the lowest daily readings was 38°·0, being 0°·5 *higher* than the average of the preceding 25 years.
The mean daily range was 12°·5, being 0°·8 *greater* than the average of the preceding 25 years.
The mean for the month was 44°·3, being 0°·9 *higher* than the average of the preceding 25 years.

MONTH and DAY, 1866.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Nov. 1			10, ci.-s, cu.-s	10, ci.-s, cu.-s : 10 : 4, li.-cl, ci
2		0 : 0 : sP,g.-cur,sps	10, ci.-s, ci.-cu, cu.-s. th.-r	10, ci.-s, ci.-cu : 5, ci.-s, cu.-s
3	w		10, ci.-cu, ci.-s, sl.-r	v, oc.-r, ci, ci.-s, ci.-cu: v, oc.-r : 0, f, d
4			h.-d : 6, ci, ci.-cu, v	v, ci, ci.-cu, h : 10
5			sl.-r : 10, ci.-s	10, ci.-s : 10
6			8, ci.-cu, cu.-s, d	3, ci, ci.-s, cu.-s, ci.-cu, m: 0, h.-d, m
7			th.-cl : 10, sc, ci.-s, cu.-s, w	v, li.-cl, ci, ci.-cu: v, sl.-r : v, li.-cl, d
8			10, ci.-s, sl.-r	v, sc, w : 10, h.-r
9			0, m : 0	6, ci.-cu, cu.-s, h : 0, d, ms
10			0, h.-d, m : th.-f	3, ci, ci.-s, v : 10, r
11			10, h.-r, w 3, li.-cl, ci, ci.-cu, v	10, ci, ci.-cu, ci.-s: v : 0, d
12			10, cu.-s, ci.-s	9, ci.-s, cu.-s, ci.-cu, ci, glm : 10, ci.-s, oc.-r: 10, ci.-s, w
13			10, sc, st.-w : 10, sc, fr.-h.-sqs	v, ci, ci.-cu, ci.-s, cu.-s, sc, m : v, li.-cl, ms
14			0, ms : 1, li.-cl, h, w	v, ci, ci.-cu, cu.-s, h : 0, h
15			d : 4, ci, v	10, sl.-r : 10, sl.-r
16			10, ci.-s, cu.-s, sc, th.-r	v, sc, oc.-shs, st.-w : v, sc, oc.-shs, w
17			h.-fr : 0	1, li.-cl, h, sl.-f : 0, f, lu.-ha, lu.-co, h.-fr, h
18			10, r : 10, oc.-r : 10, r, sc	v, sc : v, sc : 10, cu.-s
19			h.-fr, sl.-r : 1, ci	5, ci, h, ci.-s : 0
20			h.-fr : 0	4, ci, ci.-s, h : v : 10, ci, ci.-cu. h
21			9, ci, ci.-cu, ci.-s, cu.-s, sl.-f	5, ci.-cu, ci.-s, h, f : 0, d, f
22			d, sl.-f : 10, sl.-f	10, f : 10, f
23			10, ci.-s, s, th.-r	10, th.-r, sc : 2, ci.-cu, cu.-s
24			h.-fr : 1, li.-cl, h, sl.-f, v	10, ci, ci.-s : 10
25			1, ci.-cu, ci.-s, sl.-f	10, ci.-s, cu.-s, sq, r : v
26			d : 10	6, ci.-cu, cu.-s, ci.-s, ci, h : 10
27			6, ci, ci.-cu, ci.-s	7, ci, ci.-cu, cu.-s : v : 0
28			h.-fr : 0, h	1, li.-cl, h : 0, h.-fr, f
29		0 : 0 : w	h.-fr : 3, li.-cl, h, f	0, h : 10 : 10
30	w	w	0, h	0 : 0, h.-fr

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 54°·7 on the 13th; and the lowest was 20°·1 on the [illegible]

The mean ,, was 39°·7, being 0°·2 *lower* than the average of the preceding 25 years.

Elastic Force of Vapour.—The mean for the month was 0in·2[illegible]4, being [illegible] less than the average of the preceding 25 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was [illegible]·8, being *the same as* the average of the preceding 25 years.

Degree of Humidity.—The mean for the month was 84 (that of Saturation being represented by 100), being 5 *less* than the average of the preceding 25 years.

Weight of a Cubic Foot of Air.—The mean for the month was 548 grains, being 1 grain *greater* than the average of the preceding 25 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 6·1.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·6.

WIND.

The proportions were of N. 3, S. 10, W. 15, E. 2, and Calm 0. The greatest pressure in the month was 22[illegible]·0 on the square foot on the [illegible].

RAIN.

Fell on 13 days in the month, amounting to 1in·48, as measured in the simple cylinder gauge partly sunk below the ground; being 0in·95 *less* than the average fall of the preceding 51 years.

ELECTRICITY.

The electrical apparatus was not in action on November 1, and from November 3 to 28.

MONTH and DAY, 1866.	Phases of the Moon.	Mean Daily Reading of the Barometer (corrected and reduced to 32 Fahrenheit).	READINGS OF THERMOMETERS.								Difference between the Dew Point Temperature and Air Temperature.			Difference between the Mean Temperature of the Day and the Mean Temperature of the same Day on an Average of 50 Years.	WIND AS DEDUCED FROM ANEMOMETERS.						Rain in Inches, collected in a Gauge whose receiving surface is 5 inches
			Dry.			Dew Point.	Highest in the Sun, as shown by a Self-Registering Thermometer with blackened bulb in vacuo, placed on the Grass	Lowest on the Grass, as shown by a Self-Registering Minimum Thermometer	In the Water of the Thames, at Greenwich, by Self-Registering Thermometers, read at 9$^{\text{h}}$ A.M.						OSLER'S.					ROBINSON'S.	
															General Direction.		Pressure in lbs. on the square foot.				
			Highest.	Lowest.	Mean Daily Value.	Mean Daily Value.			Highest.	Lowest.	Mean Daily Value.	Greatest.	Least.		A.M.	P.M.	Greatest.	Least.	Mean of 24 Obs.	Amount of Horizontal Movement of the Air on each Day.	
		in.	°	°	°	°	°	°	°	°	°	°	°	°			lbs.	lbs.	lbs.	miles.	in.
Dec. 1	..	29·638	35·2	28·0	32·5	27·2	38·0	25·5	40·7	39·7	5·3	7·3	4·0	— 9·6	E : ESE	E	0·3	0·0	0·0	151	0·0
2	..	29·679	44·8	33·8	39·2	35·2	48·4	30·0	41·3	37·9	4·0	6·2	1·3	— 3·0	E : N : NW : W	SW : S	2·0	0·0	0·1	340	0·2
3	..	29·633	52·9	42·4	48·7	46·6	55·3	31·3	40·8	37·7	2·1	5·8	1·0	+ 6·4	SW	SW	19·0	0·1	2·6	616	0·0
4	..	29·571	55·1	50·7	53·4	51·4	56·7	49·7	43·1	39·7	2·0	4·0	0·2	+11·2	SW	SW	25·0	0·5	5·1	607	0·1
5	..	29·649	55·1	47·5	52·4	51·8	56·3	46·7	44·1	41·7	0·6	2·6	0·0	+10·2	WSW	SW : W	7·0	0·0	1·1	324	0·2
6	Apogee	29·601	56·3	46·4	52·0	49·8	56·4	44·6	47·1	43·7	2·2	3·8	1·6	+ 9·9	SW : S	SW	30·0	0·0	2·5	629	0·3
7	New	29·424	55·0	39·4	45·6	38·0	55·7	34·5	48·0	44·7	7·6	9·9	2·5	+ 3·6	SW	WSW : W	20·0	0·2	3·7	480	0·0
8	Greatest Declination S	30·177	42·7	30·9	36·9	31·1	47·7	26·0	47·3	44·7	5·8	11·2	1·3	— 4·8	W	NW : WSW : SE	2·0	0·0	0·2	216	0·0
9	..	30·045	48·2	28·6	41·5	39·7	50·6	26·4	46·3	43·7	1·8	6·9	0·0	+ 0·2	S	SSW : SW	16·0	0·0	1·8	536	0·0
10	..	29·939	52·7	35·4	43·2	37·9	52·7	31·0	44·8	43·2	5·3	8·6	1·7	+ 2·2	WSW : W	NNW : SW	16·0	0·0	0·6	171	0·0
11	..	30·146	39·3	32·2	35·3	34·5	42·2	29·6	43·8	41·8	0·8	2·1	0·0	— 5·4	WSW : N	Calm	0·0	0·0	0·0	182	0·0
12	..	29·656	53·4	38·2	48·2	47·5	61·5	35·1	43·8	41·7	0·7	5·4	0·0	+ 7·6	S : SW	WSW	4·0	0·0	0·6	506	0·1
13	..	29·301	55·0	42·0	49·3	46·8	55·0	39·1	43·4	41·7	2·5	6·2	0·4	+ 8·8	SW	WSW	30·0	0·1	2·3	473	0·2
14	..	29·306	47·1	39·4	42·7	37·5	57·1	35·7	41·8	41·2	5·2	7·6	2·5	+ 2·3	WSW	WSW	2·3	0·0	0·3	311	0·0
15	First Quarter In Equator.	29·308	49·2	37·2	43·5	40·6	49·7	31·9	41·8	41·7	2·9	4·8	0·7	+ 3·3	WSW : SW : SSW	SSW : WSW	16·0	0·0	1·0	513	0·1
16	..	29·622	46·0	39·0	43·1	37·4	46·6	34·7	41·8	41·7	5·7	7·9	3·5	+ 3·1	WSW	WSW	13·0	0·0	0·8	266	0·0
17	..	30·053	50·6	34·9	44·7	43·8	53·3	30·0	42·8	40·7	0·9	3·8	0·0	+ 4·9	WSW : S	SW	0·8	0·0	0·1	301	0·0
18	..	30·104	53·5	44·9	49·7	45·5	57·0	39·7	41·8	40·2	4·2	8·4	1·7	+10·1	SW	SW : SSW	12·0	0·0	0·3	380	0·0
19	..	30·211	51·3	33·0	42·6	35·5	54·6	27·0	42·8	40·7	7·1	12·8	3·8	+ 3·2	SW : WNW	NW : SSW	6·0	0·0	0·4	151	0·0
20	..	30·313	41·7	29·8	36·1	33·7	44·0	23·8	43·0	41·7	2·4	4·1	0·9	— 3·0	Calm	S	0·0	0·0	0·0	96	0·0
21	Perigee, Full: Greatest Dec. N	30·171	39·2	30·9	35·4	33·3	40·5	26·1	42·1	41·1	2·1	4·1	0·0	— 3·4	SW	SW	0·0	0·0	0·0	127	0·0
22	..	30·262	40·7	30·6	37·3	37·1	41·0	26·8	42·5	41·3	0·2	1·6	0·0	— 1·2	SW	Calm	0·0	0·0	0·0	68	0·0
23	..	30·229	44·9	39·4	41·9	41·0	50·5	37·0	42·5	40·7	0·9	3·7	0·0	+ 3·8	SW	SW	0·0	0·0	0·0	180	0·0
24	..	30·148	43·3	36·9	39·7	37·7	46·0	35·1	42·8	40·7	2·0	3·5	0·9	+ 1·9	SSW	SSW	0·0	0·0	0·0	107	0·0
25	..	30·030	46·8	34·5	40·9	37·5	47·0	30·7	43·8	41·7	3·4	4·6	2·4	+ 3·3	SW : S	SSW	1·1	0·0	0·1	323	0·0
26	..	29·785	50·4	43·3	46·4	42·5	55·2	40·7	42·8	39·7	3·9	6·5	0·8	+ 9·0	SSW	SW	14·5	0·0	1·2	531	0·0
27	..	29·689	47·7	42·1	44·8	37·4	53·1	36·5	43·0	40·7	7·4	9·5	4·6	+ 7·5	W	W : WSW	14·0	0·1	2·3	467	0·0
28	In Equator: Last Quarter	29·811	51·4	44·6	47·5	41·2	5[illegible]·0	38·0	..	..	6·3	8·6	4·6	+10·3	W	W	9·3	0·0	1·2	479	0·0
29	..	29·493	49·7	43·1	46·7	41·4	55·1	36·3	43·1	41·0	5·3	8·0	1·3	+ 9·4	W : WSW	WSW : W	13·0	0·0	1·8	525	0·0
30	..	29·152	41·9	31·5	36·5	31·3	51·8	28·0	42·8	40·7	5·2	8·6	3·1	— 0·9	WSW	WSW	19·0	0·0	1·0	329	0·0
31	..	29·150	34·7	27·7	31·0	27·0	36·0	21·0	42·8	39·7	4·0	7·0	2·1	— 6·5	SW	SW : Calm	0·0	0·0	0·0	142	0·0
Means	..	29·784	47·6	37·4	42·9	39·3	50·8	33·2	43·3	41·2	3·5	6·3	1·5	+ 3·1	...	...	..	..	..	Sum 1052	Sum 1·8

BAROMETER READINGS FROM EYE-OBSERVATIONS.

	The first minimum in the month	was 29$^{\text{in}}$·626 on the 1st.
The first maximum in the month was 29$^{\text{in}}$·698 on the 2nd;	the second minimum ,,	was 29$^{\text{in}}$·557 on the 4th.
The second maximum ,, was 29$^{\text{in}}$·739 on the 6th;	the third minimum ,,	was 29$^{\text{in}}$·361 on the 7th.
The third maximum ,, was 30$^{\text{in}}$·335 on the 8th;	the fourth minimum ,,	was 29$^{\text{in}}$·806 on the 9th.
The fourth maximum ,, was 30$^{\text{in}}$·18[illegible] on the 11th;	the fifth minimum ,,	was 29$^{\text{in}}$·218 on the 13th.
The fifth maximum ,, was 29$^{\text{in}}$·[illegible] on the 15th;	the sixth minimum ,,	was 29$^{\text{in}}$·186 on the 15th.
The sixth maximum ,, was 30$^{\text{in}}$·152 on the 18th;	the seventh minimum ,,	was 30$^{\text{in}}$·044 on the 18th.
The absolute maximum ,, was 30$^{\text{in}}$·355 on the 20th;	the eighth minimum ,,	was 30$^{\text{in}}$·147 on the 21st.
The eighth maximum ,, was 30$^{\text{in}}$·277 on the 22nd;	the ninth minimum ,,	was 29$^{\text{in}}$·587 on the 26th.
The ninth maximum ,, was 29$^{\text{in}}$·860 on the 28th;	the absolute minimum ,,	was 29$^{\text{in}}$·078 on the 30th.

The range in the month was 1$^{\text{in}}$·277.

The mean for the month was 29$^{\text{in}}$·784, being 0$^{\text{in}}$·048 *lower* than the average of the preceding 25 years.

TEMPERATURE OF THE AIR.

The highest in the month was 56°·3 on the 6th; the lowest was 27°·7 on the 31st.

The range ,, was 28°·6.

The mean ,, of all the highest daily readings was 47°·6, being 2°·3 *higher* than the average of the preceding 25 years.

The mean ,, of all the lowest daily readings was 37°·4, being 1°·7 *higher* than the average of the preceding 25 years.

The mean daily range was 10°·2, being 0°·7 *greater* than the average of the preceding 25 years.

The mean for the month was 42°·9, being 2°·5 *higher* than the average of the preceding 25 years.

MONTH and DAY, 1866.	ELECTRICITY.		CLOUDS AND WEATHER.	
	A.M.	P.M.	A.M.	P.M.
Dec. 1	w	w	0, h.-fr : 10	10 : 10 : 10, r
2	0	0	10, c.-r : 10, cu.-s, f, v	v, ci.-s, cu.-s : v, ci.-s : 10, r
3	0	0	10 : 6, ci, ci.-cu, ci.-s, th.-r	10, w : 10, sqs
4			sqs : 10, sc, sl.-r, w	10,sc,oc.-r,st.-w : 10,oc.-r,sc,st.-w : 10, sc
5			10, sc, r	10, oc.-r, sc : 10, oc.-r, sc : 10, r, sc
6			10, c.-r, sc : sl.-r : 10, h.-r	10, oc.-r, sc : 10, sc, st.-w : 10, sl.-r, st.-w
7			10, w, sl.-r : 10 : 10, glm	8,ci.-s,ci.-cu,sqs,v : v, r : 0
8			h.-fr : 0, h, sl.-f	1, ci, ci.-s, h : 0 : 0, f
9			h.-fr : 10, th.-cl, ci.-s, cu.-s	10, w : 10, st.-w, oc.-r : 10, sl.-r
10			2, h, ci	5, ci, ci.-cu, v : 0, f
11			10, li.-cl, f	9, li.-cl, ci, sl.-f : 10, li.-cl
12			10, sc, oc.-r	10, sc, cu.-s, sl.-r : v, sl.-r
13			10, sc, th.-r, w	10, h.-r, s, sc, w : v : 0, m-
14			0 : r : 3, ci, ci.-cu	v, ci, ci.-cu, ci.-s : 0
15			9, ci.-s, ci.-cu, sl.-r	10, oc.-r, sc, w : v, l, h.-r, sc, w
16			4, ci, ci.-s, w	10 : v : li.-cl
17			10, ci.-s, cu.-s	10, ci.-s, glm, sl.-r : li.-cl, lu.-co, lu.-ha
18			sl.-r : 8, ci.-cu, ci.-s	10, ci.-s, s : 0, d
19			5, ci, ci.-s, ci.-cu, h, sl.-f, gt.-glm	1, ci, ci.-s, h : f : 0
20			9, ci, ci.-cu, cu.-s, h.-fr, f	8, ci, ci.-cu, ci.-s, f : 10
21			10	8, cu.-s, h : v, lu.-ha, h.-fr, f, h
22			10, f	10, th.-f : 10, th.-f, m.-r
23			10, f	10, sl.-f : 2, ci, d
24		0	10	10 : 10, m.-r : 10, m.-r
25	w	w	5, ci, ci.-cu, ci.-s, sl.-f	10 : 10
26	0	w	10, sl.-r, li.-cl	5, li.-cl : v : 10, h.-sqs
27			10, h.-sqs : li.-cl : 8,ci.-cu,cu.-s,ci.-s,sl.-f	10,ci.-s,cu.-s,ci.-cu,sc,sl.-r : v, oc.-r
28			sl.-r : 10	9, ci, ci.-cu, ci.-s, cu.-s : 0
29			6, ci, ci.-cu	9, ci,ci.-cu,cu.-s,w : 10, w : 1, cu.-s
30			h.-fr : 0, h	3, ci, ci.-s, w : 0 : 0, h.-fr
31			h.-fr : 8, ci, ci.-cu	6, ci,ci.-cu,v,th.-cl : v, r : v, r, sl.-sn

HUMIDITY OF THE AIR.

Temperature of the Dew Point.

The highest in the month was 53°·3 on the 5th; and the lowest was 24°·9 on the 1st.

The mean „ was 39°·3, being 2°·2 *higher* than the average of the preceding 25 years.

Elastic Force of Vapour.—The mean for the month was $0^{in}\cdot240$, being $0^{in}\cdot017$ *greater* than the average of the preceding 25 years.

Weight of Vapour in a Cubic Foot of Air.—The mean for the month was $2^{grs}\cdot8$, being $0^{gr}\cdot2$ *greater* than the average of the preceding 25 years.

Degree of Humidity.—The mean for the month was 87 (that of Saturation being represented by 100), being 1 *less* than the average of the preceding 25 years.

Weight of a Cubic Foot of Air.—The mean for the month was 549 grains, being 3 grains *less* than the average of the preceding 25 years.

CLOUDS.

The mean amount for the month, a clear sky being represented by 0 and a cloudy sky by 10, was 7·4.

OZONE.

The mean amount for the month, on a scale ranging from 0 to 10, was 0·6.

WIND.

The proportions were of N. 0, S. 12, W. 16, E. 1, and Calm 2. The greatest pressure in the month was 30 [illegible]·0 on the [illegible]

RAIN.

Fell on 18 days in the month, amounting to $1^{in}\cdot85$, as measured in the simple cylinder gauge partly sunk below the ground; being [illegible] the preceding 51 years.

ELECTRICITY.—The electrical apparatus was not in action from December 4 to 24, and 27 to 31.

MAXIMA AND MINIMA READINGS OF THE BAROMETER.

The following table contains the highest and lowest readings of the Barometer, reduced to 32° Fahrenheit, extracted from the photographic records. The readings are accurate; but the times are liable to great uncertainty, as the barometer frequently remains at its highest or lowest point through several hours. The time given is the middle of the stationary period. Where the symbol : follows the time, it denotes that the quicksilver has been sensibly stationary through a period of more than one hour.

MAXIMA.		MINIMA.		MAXIMA.		MINIMA.	
Approximate Mean Solar Time, 1866.	Reading.	Approximate Mean Solar Time, 1866.	Reading.	Approximate Mean Solar Time, 1866.	Reading.	Approximate Mean Solar Time, 1866.	Reading.
d h m	in.	d h m	in.	d h m	in.	d h m	in.
January 1. 22. 30	29·880			February 27. 6. 55	29·312		
		January 2. 13. 23	29·321			February 27. 21. 12	29·018
3. 6. 20:	29·854			March 2. 13. 30	29·579		
		4. 17. 6	29·623			March 3. 4. 30:	29·473
5. 22. 21:	29·951			4. 22. 3:	29·664		
		6. 23. 49	29·366			7. 4. 19:	29·015
7. 7. 4	29·450			10. 11. 48:	30·240		
		7. 18. 26	29·036			16. 18. 20:	28·945
8. 11. 30	29·140			18. 10. 16:	29·180		
		9. 0. 34	28·866			19. 2. 26	29·046
10. 4. 46:	29·118			22. 14. 23:	29·783		
		10. 19. 58:	28·643			23. 15. 56:	28·896
12. 12. 20:	29·853			25. 22. 25:	30·056		
		13. 1. 20	29·312			26. 17. 0:	29·925
13. 22. 34:	29·736			27. 19. 39:	30·044		
		14. 14. 4	29·565			28. 13. 12	29·936
15. 10. 57:	29·963			29. 21. 55	30·053		
		16. 1. 43	29·512			April 1. 19. 57	29·256
16. 21. 46:	30·098			April 5. 20. 59:	29·886		
		17. 2. 53	29·954			7. 2. 17	29·750
17. 12. 30	30·046			7. 23. 51:	29·940		
		18. 19. 36	29·538			11. 12. 24:	29·178
19. 6. 11:	29·630			14. 21. 55:	30·125		
		19. 18. 16	29·406			16. 6. 6	29·725
21. 6. 41	29·728			17. 21. 31:	29·846		
		22. 5. 41	29·571			19. 6. 40	29·589
24. 22. 30:	30·506			22. 10. 42:	30·294		
		28. 16. 16:	29·537			28. 2. 58	29·280
29. 22. 45:	29·950			29. 11. 26:	29·742		
		February 1. 3. 37	29·165			May 1. 5. 0	29·278
February 1. 15. 20:	29·336			May 6. 21. 5:	30·114		
		1. 22. 10	29·135			9. 1. 55	29·585
2. 15. 39	29·765			10. 8. 57	29·845		
		3. 2. 10	29·376			11. 15. 40	29·400
3. 19. 27	29·933			15. 16. 48:	30·252		
		4. 9. 40	29·523			18. 6. 16	29·995
4. 11. 35	29·596			20. 23. 42	30·240		
		4. 13. 40	29·540			26. 1. 32:	29·455
5. 0. 28	29·866			27. 21. 47:	29·712		
		5. 13. 20	29·560			28. 15. 32	29·594
5. 20. 13	29·682			29. 19. 31:	29·816		
		6. 21. 23:	29·418			31. 14. 16	29·462
8. 11. 15:	29·866			June 2. 9. 45	29·736		
		11. 4. 34	28·450			June 3. 1. 0	29·637
13. 13. 51:	29·640			3. 16. 12	29·760		
		14. 15. 21:	29·232			3. 18. 25	29·652
15. 7. 21:	29·406			8. 11. 55:	30·118		
		15. 15. 37:	29·275			10. 3. 28	29·857
17. 13. 51:	29·864			10. 17. 59	29·946		
		18. 5. 25	29·793			12. 10. 22	29·425
18. 23. 41	29·920			14. 11. 20:	29·868		
		20. 3. 17:	29·843			16. 12. 16	29·200
21. 10. 22:	30·197			17. 10. 29:	29·644		
		23. 3. 21	29·523			18. 4. 48	29·348
23. 22. 38:	29·812			19. 22. 25:	29·932		
		25. 17. 15:	29·155			21. 15. 36	29·662

MAXIMA AND MINIMA READINGS OF THE BAROMETER—*concluded.*

MAXIMA.			MINIMA.			MAXIMA.			MINIMA.		
Approximate Mean Solar Time, 1866.		Reading.	Approximate Mean Solar Time, 1866.		Reading.	Approximate Mean Solar Time, 1866.		Reading.	Approximate Mean Solar Time, 1866.		Reading.
	d h m	in.		d h m	in.		d h m	in.		d h m	in.
June	23. 18. 59	30·054	June	27. 4. 0	29·710	October	0. 14. 36:	29·953	October	2. 1. 20	29·830
	28. 11. 50	29·848	July	3. 11. 12:	29·097		6. 22. 4:	30·344		13. 17. 22	29·727
July	4. 9. 36	29·413		4. 17. 17	29·300		15. 21. 20	30·078		18. 0. 41	29·716
	10. 19. 15	30·174		12. 19. 27	29·896		19. 21. 33	30·084		22. 0. 58	29·713
	14. 11. 52	30·013		18. 23. 40	29·737		22. 23. 20:	30·020		25. 0. 40	29·488
	21. 20. 56	30·002		23. 2. 35	29·834		27. 6. 35	29·863		27. 15. 35	29·737
	25. 8. 57	30·093		28. 17. 43	29·373		28. 21. 20	30·250		30. 1. 53	29·590
	30. 9. 26:	29·680		31. 2. 4	29·442		30. 21. 28	29·994	November	3. 0. 57	29·525
	31. 22. 49:	29·778	August	2. 1. 4	29·370	November	4. 10. 9:	29·855		5. 2. 12	29·728
August	2. 21. 30	29·646		4. 5. 33	29·493		6. 9. 38	30·040		8. 7. 25	29·560
	5. 10. 27:	29·700		7. 0. 57	29·260		9. 22. 36:	30·054		10. 17. 25	29·398
	7. 20. 10	29·595		8. 13. 28	29·357		11. 14. 30	29·838		12. 21. 0	29·393
	11. 1. 14	29·970		12. 13. 0	29·530		14. 17. 30:	30·010		16. 3. 0	29·053
	13. 7. 55	29·824		13. 23. 0	29·580		17. 9. 0	30·169		18. 2. 1:	29·542
	15. 2. 6	29·824		16. 14. 18	29·473		20. 8. 10:	30·038		21. 1. 24	29·908
	17. 22. 27:	29·820		19. 16. 22	29·533		22. 0. 0	30·067		23. 6. 28	29·504
	22. 21. 50:	29·930		23. 16. 57	29·804		24. 0. 0	29·797		25. 3. 8	29·310
	24. 21. 11	29·938		29. 5. 40	29·120		26. 6. 27:	29·889		26. 18. 50:	29·697
	31. 11. 12:	29·763	September	2. 3. 11	29·331		28. 10. 41:	30·154	December	1. 3. 0	29·626
September	3. 8. 35	29·746		4. 22. 6	29·200	December	2. 0. 35	29·698		4. 3. 54:	29·533
	5. 21. 15	29·539		6. 12. 38	29·216		5. 16. 15:	29·784		7. 2. 17	29·333
	8. 19. 42:	29·674		9. 17. 42	29·313		8. 13. 30:	30·347		9. 14. 26	29·746
	10. 14. 40	29·556		10. 22. 45	29·332		10. 22. 43	30·189		13. 2. 46	29·212
	11. 21. 35	29·815		13. 18. 33	29·273		13. 11. 44	29·350		13. 19. 35	29·193
	14. 21. 22	29·602		16. 9. 56	29·040		14. 17. 9	29·443		15. 4. 7	29·180
	17. 21. 37:	29·938		18. 16. 3	29·733		17. 22. 10:	30·167		18. 16. 27	29·943
	19. 20. 45:	29·868		20. 15. 49	29·384		19. 14. 30:	30·355		21. 3. 30:	30·147
	20. 21. 49	29·502		21. 22. 21	29·025		21. 23. 34:	30·296		26. 12. 56	29·380
	24. 19. 53:	29·875		28. 11. 44	29·585		27. 22. 5	29·874		30. 7. 13	29·078

ABSOLUTE MAXIMA AND MINIMA READINGS OF THE BAROMETER for each Month in the Year 1866.

[Extracted from the preceding Table.]

1866, MONTH.	Readings of the Barometer.		Range of Reading in each Month.
	Maxima.	Minima.	
	in.	in.	in.
January	30·506	28·643	1·863
February	30·197	28·450	1·747
March	30·240	28·896	1·344
April	30·294	29·178	1·116
May	30·252	29·278	0·974
June	30·118	29·200	0·918
July	30·174	29·097	1·077
August	29·970	29·120	0·850
September	29·938	29·025	0·913
October	30·344	29·488	0·856
November	30·169	29·053	1·116
December	30·355	29·078	1·277

The highest reading in the year was $30^{\mathrm{in}}{\cdot}506$ in the month of January. The lowest reading in the year was $28^{\mathrm{in}}{\cdot}450$ in the month of February.

The range of reading in the year was $2^{\mathrm{in}}{\cdot}056$.

MONTHLY MEANS OF RESULTS FOR METEOROLOGICAL ELEMENTS AT THE ROYAL OBSERVATORY, GREENWICH, in the Year 1866.

1866, MONTH.	Mean Reading of the Barometer.	TEMPERATURE OF THE AIR.							Mean Temperature of Dew Point.	Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight required to saturate a Cubic Foot of Air.
		Highest.	Lowest.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean Temperature.				
	in.	°	°	°	°	°	°	°	°	in.	grs.	grs.
January ..	29·702	54·3	23·7	30·6	47·8	36·7	11·1	42·6	38·4	0·234	2·7	0·5
February..	29·529	57·0	24·2	32·8	47·1	34·7	12·4	40·5	35·9	0·213	2·4	0·5
March	29·527	64·0	22·5	41·5	48·4	34·5	13·9	40·5	34·8	0·202	2·3	0·6
April	29·743	79·0	34·2	44·8	58·2	40·8	17·4	47·9	41·5	0·262	3·0	0·8
May	29·813	73·1	32·6	40·5	61·4	40·8	20·6	50·1	40·8	0·255	2·9	1·2
June	29·774	86·5	42·2	44·3	73·2	52·0	21·2	60·9	53·5	0·410	4·6	1·4
July	29·770	87·2	46·0	41·2	72·6	52·5	20·1	61·0	53·9	0·416	4·7	1·3
August ...	29·638	78·5	45·0	33·5	69·4	52·3	17·1	59·4	52·7	0·399	4·5	1·2
September.	29·575	71·0	41·3	29·7	65·1	50·6	14·5	56·4	51·5	0·381	4·3	0·8
October ...	29·927	68·1	31·0	37·1	58·2	45·7	12·5	51·3	48·2	0·338	3·8	0·4
November .	29·786	59·6	26·5	33·1	50·5	38·0	12·5	44·3	39·7	0·244	2·8	0·5
December .	29·784	56·3	27·7	28·6	47·6	37·4	10·2	42·9	39·3	0·240	2·8	0·4
Means	29·714	69·6	33·1	36·5	58·3	43·0	15·3	49·8	44·2	0·299	3·4	0·8

1866, MONTH.	Mean Degree of Humidity. (Sat. = 100.)	Mean Weight of a Cubic Foot of Air.	Mean Amount of Cloud. 0—10	RAIN.			WIND.											
				Number of Rainy Days.	Amount collected on the Ground.		From Osler's Anemometer.											From Robinson's Anemometer.
							Number of Days for Mean Direction of the Wind referred to different Points of Azimuth.								Number of Calm Days and Days on which the Pressure of the Wind was less than ½ lb. on the Sq. Foot.	Mean Daily Pressure in lbs. on the Square Foot.	
					Gauge read Daily.	Gauge read Monthly.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			Mean Daily Horizontal Movement of Wind in Miles.
		grs.			in.	in.											
January........	86	548	7·5	17	3·68	3·48	1	1	0	0	2	15	9	2	1	0·80	361
February.......	85	547	7·2	18	4·03	3·90	3	1	0	0	1	11	7	2	3	0·96	337
March	81	547	8·1	15	1·63	1·56	5	5	1	1	4	5	4	2	4	0·22	239
April..........	79	543	6·3	13	2·44	2·44	2	3	7	2	1	7	4	0	4	0·27	292
May...........	71	542	6·1	8	1·94	1·95	3	5	5	2	0	6	3	1	6	0·12	240
June...........	77	529	6·9	15	3·64	3·57	1	3	3	2	2	12	4	1	2	0·13	242
July...........	78	528	7·0	9	1·62	1·58	3	4	3	1	1	5	7	3	4	0·17	233
August	79	528	7·7	18	2·42	2·40	2	1	1	1	3	9	6	5	3	0·54	254
September......	84	530	7·8	19	3·90	3·90	1	1	1	2	5	14	3	1	2	0·79	251
October........	90	542	7·3	10	2·09	2·05	5	7	4	2	2	6	1	1	3	0·15	186
November......	84	548	6·1	13	1·48	1·48	2	0	1	1	3	13	7	3	0	0·71	333
December	87	549	7·4	18	1·85	1·78	0	0	1	0	4	16	7	1	2	1·00	340
Means	82	540	7·1	Sum 173	Sum 30·72	Sum 30·09	Sum 28	Sum 31	Sum 27	Sum 14	Sum 28	Sum 119	Sum 62	Sum 22	Sum 34	..	..

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS

WITH THE

ACTINOMETER.

1866.

OBSERVATIONS WITH THE ACTINOMETER.

Day, 1866.	Greenwich Mean Solar Time of the Initial Reading.	Instrument exposed to the Sun's Rays, or in the Shade.	Readings of the Graduated Scale. Initial A.	Readings of the Graduated Scale. Terminal B.	Change in One Minute, B–A.	Apparent Effect of the Sun's Radiation in parts of the Scale.	Mean Result of each Group in parts of the Scale.	Greenwich Mean Solar Time corresponding to the Mean of each Group.	Altitude of the Sun.	Thermometer attached to the Actinometer.	Blackened Bulb Thermometer placed on Grass.	General Remarks.	Observer.
	h m s		div.	div.	div.	div.	div.	h m s		°	°		
Jan. 0	23. 45. 0	Sun	9·9	37·0	27·1	. .				49·6	45·2	Cloudless.	AH
	46. 30	Shade	40·0	43·3	3·3	23·8				50·5	49·6	,,	,,
	48. 0	Sun	5·8	32·9	27·1	24·3				. .	49·0	,,	,,
	49. 30	Shade	35·2	37·5	2·3	24·4				51·0	49·4	,,	,,
	51. 0	Sun	13·7	40·0	26·3	24·3	24·5	23. 51. 30	11	. .	49·4	,,	,,
	52. 30	Shade	41·6	43·3	1·7	24·6				51·7	49·0	,,	,,
	54. 0	Sun	5·5	31·9	26·4	25·0				. .	50·0	,,	,,
	55. 30	Shade	33·5	34·6	1·1	25·1				52·2	49·2	,,	,,
	23. 57. 0	Sun	34·8	60·7	25·9	. .				. .	49·6	,,	AH
Jan. 3	0. 24. 0	Sun	9·6	39·2	29·6	. .				52·0	54·7	Very thin clouds here and there.	N
	25. 30	Shade	42·0	45·0	3·0	19·7				52·2	55·3	,, ,, ,,	,,
	27. 0	Sun	46·2	62·0	15·8	13·1				52·6	53·5	Thin clouds in front of Sun.	,,
	28. 30	Shade	63·7	66·0	2·3	11·1	13·2	0. 29. 0	11	53·0	51·0	,, ,,	,,
	30. 0	Sun	67·0	78·0	11·0	9·2				53·0	50·0	Cirro-stratus.	,,
	31. 30	Shade	78·8	80·0	1·2	12·7				53·3	50·0	,,	,,
	0. 33. 0	Sun	80·6	97·4	16·8	. .				53·8	50·8	Somewhat brighter.	N
Jan. 22	23. 3. 0	Sun	37·5	49·2	11·7	. .				51·2	54·0	Sun partially obscured by clouds.	AH
	4. 30	Shade	52·0	56·7	4·7	6·9				. .	53·0	,, ,, ,,	,,
	6. 0	Sun	14·7	26·3	11·6	7·5				. .	52·8	Thin cloud. Dense haze.	,,
	7. 30	Shade	28·7	32·2	3·5	8·4	8·5	23. 8. 0	16	51·5	52·8	,, ,,	,,
	9. 0	Sun	34·0	46·2	12·2	9·3				. .	52·4	,, ,,	,,
	10. 30	Shade	47·7	50·0	2·3	10·6				51·8	53·8	,, ,,	,,
	23. 12. 0	Sun	51·0	64·5	13·5	. .				52·1	54·0	Haze.	AH
Jan. 28	22. 31. 0	Sun	15·0	40·4	25·4	. .				51·6	65·2	Clear about Sun.	AH
	32. 30	Shade	43·2	47·2	4·0	21·6				51·8	65·3	Light cirrus about Sun.	,,
	34. 0	Sun	13·6	39·4	25·8	22·4				. .	65·2	,, ,,	,,
	35. 30	Shade	41·6	44·4	2·8	22·1	22·0	22. 36. 0	15	52·5	65·2	,, ,,	,,
	37. 0	Sun	8·7	32·7	24·0	21·8				. .	65·0	Clear about Sun.	,,
	38. 30	Shade	35·0	36·5	1·5	22·2				53·0	65·2	,, ,,	,,
	22. 40. 0	Sun	17·7	41·2	23·5	. .				53·4	65·4	Cirrus about Sun.	AH
Jan. 29	1. 41. 0	Sun	20·0	44·2	24·2	. .				54·5	51·7	Light clouds about Sun.	AH
	42. 30	Shade	46·8	49·5	2·7	14·2				54·5	52·2	,, ,,	,,
	44. 0	Sun	6·7	16·3	9·6	7·8	10·6	1. 44. 30	15	54·8	52·0	Sun obscured with light cirrus.	,,
	45. 30	Shade	17·2	18·0	0·8	9·8				54·8	53·5	,,	,,
	1. 47. 0	Sun	18·0	29·6	11·6	. .				55·0	54·2	,,	AH
Feb. 5	23. 30. 0	Sun	11·0	44·7	33·7	. .				53·7	81·5	Light cirrus.	AH
	31. 30	Shade	48·0	51·0	3·0	30·4				53·9	81·3	,,	,,
	33. 0	Sun	0·7	33·8	33·1	30·1				. .	81·2	,,	,,
	34. 30	Shade	36·7	39·6	2·9	30·6				54·7	80·7	,,	,,
	36. 0	Sun	7·8	41·8	34·0	31·0	30·8	23. 36. 30	18	. .	79·7	,,	,,
	37. 30	Shade	44·6	47·6	3·0	31·2				55·7	79·6	,,	,,
	39. 0	Sun	8·0	42·3	34·3	31·2				. .	79·5	,,	,,
	40. 30	Shade	44·8	48·0	3·2	31·1				56·5	78·8	,,	,,
	23. 42. 0	Sun	50·3	84·6	34·3	. .				57·2	78·6	,,	AH

In every observation, whether in the Sun's rays or in the shade, the terminal reading was taken exactly one minute after the initial reading.

The "Apparent Effect of the Sun's Radiation" is found by comparing each change (whether in the Sun's rays or in the shade) with the mean of that which immediately precedes and that which immediately follows it.

The initials N. and A. H. are those of Mr. W. C. Nash and Mr. A. Harding.

OBSERVATIONS WITH THE ACTINOMETER—*continued.*

Day, 1866.	Greenwich Mean Solar Time of the Initial Reading.	Instrument exposed to the Sun's Rays, or in the Shade.	Readings of the Graduated Scale. Initial A.	Readings of the Graduated Scale. Terminal B.	Change in One Minute. B − A.	Apparent Effect of the Sun's Radiation in parts of the Scale.	Mean Result of each Group in parts of the Scale.	Greenwich Mean Solar Time corresponding to the Mean of each Group.	Altitude of the Sun.	Thermometer attached to the Actinometer.	Blackened Bulb Thermometer placed on Grass.	General Remarks.	Observer.
	h m s		div	div	div	div	div	h m s	°	°	°		
Feb. 10	1. 26. 0	Sun	20·6	60·2	39·6	. .				54·2	76·3	Cloudless.	AH
	27. 30	Shade	64·1	68·9	4·8	31·0	31·1	1. 31. 0	18	55·0	78·2	,,	,,
	29. 0	Sun	11·2	43·2	32·0	28·0				. .	79·0	Light cirrus over Sun.	,,
	30. 30	Shade	46·1	49·3	3·2	30·4				56·0	78·0	,,	,,
	32. 0	Sun	14·4	49·6	35·2	32·5				. .	78·9	Cirrus over Sun about 20 secs.	,,
	33. 30	Shade	52·1	54·3	2·2	33·4				56·6	77·0	Cirrus about Sun.	,,
	1. 35. 0	Sun	8·0	44·1	36·1	. .				57·3	78·5	Clear about Sun.	AH
Mar. 2	2. 32. 0	Sun	31·4	75·0	43·6	. .				49·0	48·6	Light cirrus.	AH
	33. 30	Shade	81·0	88·6	7·6	38·8	41·2	2. 38. 30	20	50·0	55·4	,,	,,
	35. 0	Sun	8·5	57·7	49·2	42·4				. .	60·6	,,	,,
	36. 30	Shade	62·8	68·8	6·0	44·2				50·9	63·2	,,	,,
	38. 0	Sun	6·8	57·9	51·1	45·7				. .	67·3	,,	,,
	39. 30	Shade	62·2	67·0	4·8	41·8				51·7	68·0	,,	,,
	41. 0	Sun	4·6	46·8	42·2	37·9				. .	68·0	,,	,,
	42. 30	Shade	50·2	54·0	3·8	37·3				52·5	67·7	,,	,,
	2. 44. 0	Sun	2·0	41·9	39·9	. .				53·1	68·0	Light and high cirrus.	AH
Mar. 6	22. 43. 0	Sun	10·2	49·9	39·7	. .				30·4	85·3	Clear about Sun.	AH
	44. 30	Shade	53·8	59·0	5·2	35·6	37·3	22. 48. 0	25	31·4	83·2	,,	,,
	46. 0	Sun	0·0	41·8	41·8	36·4				. .	83·7	,,	,,
	47. 30	Shade	45·6	51·3	5·7	37·4				33·0	83·8	,,	,,
	49. 0	Sun	4·4	48·8	44·4	38·8				. .	84·0	Light cirrus about Sun.	,,
	50. 30	Shade	52·6	58·1	5·5	38·5				34·0	84·0	,,	,,
	22. 52. 0	Sun	10·0	53·7	43·7	. .				34·7	84·2	Clear about Sun.	AH
May 21	1. 15. 0	Sun	3·2	39·8	36·6	. .				52·4	76·5	Cloudless.	N
	16. 30	Shade	40·7	40·5	−0·2	37·7	39·7	1. 21. 30	54	. .	76·4	,,	,,
	18. 0	Sun	39·8	78·2	38·4	39·0				. .	74·0	,,	,,
	19. 30	Shade	79·5	78·5	−1·0	40·3				. .	74·0	,,	,,
	21. 0	Sun	6·5	46·7	40·2	40·8				54·2	74·7	,,	,,
	22. 30	Shade	47·8	47·5	−0·3	40·1				. .	77·0	,,	,,
	24. 0	Sun	47·5	87·0	39·5	39·5				. .	77·0	,,	,,
	25. 30	Shade	1·0	1·4	0·4	40·3				56·0	78·2	,,	,,
	1. 27. 0	Sun	1·3	43·3	42·0	. .				58·0	79·6	,,	N
May 21	2. 32. 0	Sun	0·0	35·5	35·5	. .				56·0	72·7	Cloudless.	AH
	33. 30	Shade	33·3	28·6	−4·7	40·6	41·3	2. 40. 0	45	. .	75·2	,,	,,
	35. 0	Sun	26·2	62·4	36·2	41·1				. .	77·2	,,	,,
	36. 30	Shade	61·0	55·9	−5·1	41·6				56·5	76·1	,,	,,
	38. 0	Sun	2·0	38·9	36·9	41·5				. .	77·8	,,	,,
	39. 30	Shade	38·1	33·9	−4·2	40·7				. .	76·2	,,	,,
	41. 0	Sun	32·0	68·1	36·1	39·9				. .	76·0	,,	,,
	42. 30	Shade	68·0	64·7	−3·3	41·4				58·2	74·6	,,	,,
	44. 0	Sun	4·8	45·0	40·2	43·0				. .	74·5	,,	,,
	45. 30	Shade	45·2	42·8	−2·4	41·7				. .	75·3	,,	,,
	2. 47. 0	Sun	41·5	80·0	38·5	. .				58·6	76·4	,,	AH

In every observation, whether in the Sun's rays or in the shade, the terminal reading was taken exactly one minute after the initial reading.

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The initials N. and A. H. are those of Mr. W. C. Nash and Mr. A. Harding.

From March 7 till May 21 the Actinometers were in the hands of Messrs. Negretti and Zambra for repair.

OBSERVATIONS WITH THE ACTINOMETER—*concluded.*

Day. 1866.	Greenwich Mean Solar Time of the Initial Reading.	Instrument exposed to the Sun's Rays, or in the Shade.	Readings of the Graduated Scale. Initial A.	Readings of the Graduated Scale. Terminal B.	Change in One Minute, B − A.	Apparent Effect of the Sun's Radiation in parts of the Scale.	Mean Result of each Group in parts of the Scale.	Greenwich Mean Solar Time corresponding to the Mean of each Group.	Altitude of Sun.	Thermometer attached to the Actinometer.	Blackened Bulb Thermometer placed on Grass.	General Remarks.	Observer.
May 21	23. 11. 0	Sun	9·6	52·0	42·4	..				49·0	72·0	Cloudless.	N
	12. 30	Shade	55·5	59·8	4·3	37·9				..	78·4	,,	,,
	14. 0	Sun	46·0	88·0	42·0	37·0				51·7	83·7	,,	,,
	15. 30	Shade	6·8	12·6	5·8	37·0	37·7	23. 15. 15	56	..	85·5	,,	,,
	17. 0	Sun	14·8	58·3	43·5	37·7				..	83·2	,,	,,
	18. 30	Shade	62·0	67·7	5·7	39·1				54·0	88·8	,,	,,
	20. 0	Sun	4·8	51·0	46·2	40·5				..	88·0	,,	,,
	21. 30	Shade	54·6	60·2	5·6	40·4	41·2	23. 23. 30	56	..	90·1	,,	,,
	23. 0	Sun	5·3	51·0	45·7	41·2				56·2	90·7	,,	,,
	24. 30	Shade	58·2	61·5	3·3	42·6				56·6	87·2	,,	,,
	23. 26. 0	Sun	5·4	51·4	46·0	..				..	88·4	,,	N
May 22	0. 8. 0	Sun	11·5	47·3	35·8	..				59·0	75·7	Cloudless.	N
	9. 30	Shade	47·6	44·2	−3·4	40·2				..	79·7	,,	,,
	11. 0	Sun	42·8	80·5	37·7	41·0				..	83·0	,,	,,
	12. 30	Shade	80·2	77·0	−3·2	42·1	41·6	0. 13. 0	58	..	82·6	,,	,,
	14. 0	Sun	5·0	45·0	40·0	42·5				60·5	86·2	,,	,,
	15. 30	Shade	45·3	43·5	−1·8	42·0				..	87·1	,,	,,
	0. 17. 0	Sun	42·5	82·8	40·3	..				62·2	86·7	,,	N

In every observation, whether in the Sun's rays or in the shade, the terminal reading was taken exactly one minute after the initial reading.

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READINGS OF THERMOMETERS SUNK IN THE GROUND.

(I.)—Reading of a Thermometer whose bulb is sunk to the depth of 25·6 feet (24 French feet) below the surface of the soil, at Noon on every Day, except Sundays, Good Friday, and Christmas Day.

Days of the Month, 1866.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d.	°	°	°	°	°	°	°	°	°	°	°	°
1	52 ·58	52 ·01	51 ·25	S	49 ·91	49 ·71	S	50 ·45	51 ·34	52 ·05	52 ·55	52 ·67
2	52 ·57	52 ·00	51 ·26	50 ·59	49 ·89	49 ·71	49 ·84	50 ·49	S	52 ·07	52 ·57	S
3	52 ·57	51 ·92	51 ·12	50 ·57	49 ·88	S	49 ·85	50 ·48	51 ·32	52 ·10	52 ·57	52 ·72
4	52 ·60	S	S	50 ·55	49 ·88	49 ·72	49 ·86	50 ·52	51 ·32	52 ·11	S	52 ·74
5	52 ·58	51 ·92	51 ·20	50 ·52	49 ·88	49 ·68	49 ·89	S	51 ·38	52 ·14	52 ·63	52 ·74
6	52 ·48	51 ·91	51 ·17	50 ·52	S	49 ·68	49 ·88	50 ·55	51 ·46	52 ·15	52 ·63	52 ·74
7	S	51 ·90	51 ·15	50 ·47	49 ·86	49 ·70	49 ·93	50 ·61	51 ·48	S	52 ·63	52 ·74
8	52 ·45	51 ·78	51 ·12	S	49 ·84	49 ·71	S	50 ·63	51 ·51	52 ·20	52 ·63	52 ·70
9	52 ·44	51 ·84	51 ·13	50 ·40	49 ·84	49 ·72	49 ·97	50 ·65	S	52 ·21	52 ·64	S
10	52 ·43	51 ·80	51 ·09	50 ·39	49 ·80	S	49 ·99	50 ·74	51 ·57	52 ·22	52 ·60	52 ·70
11	52 ·37	S	S	50 ·38	49 ·80	49 ·70	50 ·01	50 ·71	51 ·57	52 ·26	S	52 ·67
12	52 ·36	51 ·73	51 ·07	50 ·36	49 ·78	49 ·70	50 ·08	S	51 ·61	52 ·27	52 ·66	52 ·73
13	52 ·37	51 ·68	51 ·03	50 ·36	S	49 ·70	50 ·08	50 ·77	51 ·63	52 ·26	52 ·70	52 ·72
14	S	51 ·67	50 ·98	50 ·31	49 ·75	49 ·69	50 ·16	50 ·78	51 ·66	S	52 ·67	52 ·67
15	52 ·36	51 ·63	50 ·97	S	49 ·75	49 ·69	S	50 ·82	51 ·68	52 ·30	52 ·66	52 ·66
16	52 ·34	51 ·62	51 ·00	50 ·26	49 ·75	49 ·71	50 ·09	50 ·85	S	52 ·32	52 ·69	S
17	52 ·33	51 ·58	50 ·96	50 ·24	49 ·76	S	50 ·13	50 ·87	51 ·77	52 ·33	52 ·66	52 ·66
18	52 ·32	S	S	50 ·21	49 ·76	49 ·69	50 ·14	50 ·93	51 ·75	52 ·34	S	52 ·67
19	52 ·31	51 ·50	50 ·91	50 ·21	49 ·75	49 ·73	50 ·14	S	51 ·80	52 ·37	52 ·66	52 ·65
20	52 ·28	51 ·49	50 ·88	50 ·17	S	49 ·74	50 ·16	50 ·97	51 ·78	52 ·41	52 ·65	52 ·60
21	S	51 ·46	50 ·84	50 ·17	49 ·73	49 ·75	50 ·20	51 ·02	51 ·83	S	52 ·69	52 ·61
22	52 ·24	51 ·45	50 ·84	S	49 ·72	49 ·75	S	51 ·06	51 ·81	52 ·44	52 ·71	52 ·57
23	52 ·21	51 ·43	50 ·82	50 ·09	49 ·72	49 ·78	50 ·24	51 ·07	S	52 ·43	52 ·70	S
24	52 ·17	51 ·41	50 ·80	50 ·08	49 ·71	S	50 ·25	51 ·20	51 ·89	52 ·42	52 ·68	52 ·57
25	52 ·15	S	S	50 ·08	49 ·68	49 ·80	50 ·28	51 ·30	51 ·93	52 ·44	S	Christmas Day.
26	52 ·13	51 ·34	50 ·77	50 ·06	49 ·72	49 ·80	50 ·32	S	51 ·86	52 ·47	52 ·72	52 ·56
27	52 ·10	51 ·32	50 ·76	50 ·06	S	49 ·83	50 ·32	51 ·20	51 ·96	52 ·45	52 ·70	52 ·60
28	S	51 ·28	50 ·75	50 ·03	49 ·72	49 ·82	50 ·35	51 ·23	52 ·01	S	52 ·68	52 ·60
29	52 ·08		50 ·73	S	49 ·70	49 ·83	S	51 ·20	52 ·02	52 ·52	52 ·70	52 ·55
30	52 ·04		Good Friday.	49 ·94	49 ·68	49 ·86	50 ·39	51 ·27	S	52 ·58	52 ·72	S
31	52 ·08		50 ·66		49 ·68		50 ·38	51 ·29		52 ·51		52 ·43
Means.	52 ·33	51 ·65	50 ·97	50 ·28	49 ·78	49 ·74	50 ·11	50 ·88	51 ·68	52 ·31	52 ·66	52 ·65

(II.)—Reading of a Thermometer whose bulb is sunk to the depth of 12·8 feet (12 French feet) below the surface of the soil, at the same times.

Days of the Month, 1866.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	51 ·62	49 ·72	48 ·57	S	47 ·78	49 ·26	S	54 ·52	55 ·60	55 ·84	55 ·28	53 ·38
2	51 ·56	49 ·69	48 ·55	47 ·05	47 ·81	49 ·32	51 ·80	54 ·67	S	55 ·83	55 ·24	S
3	51 ·50	49 ·62	48 ·47	47 ·06	47 ·88	S	51 ·86	54 ·69	55 ·65	55 ·85	55 ·20	53 ·30
4	51 ·45	S	S	47 ·10	47 ·98	49 ·45	51 ·95	54 ·75	55 ·70	55 ·82	S	53 ·25
5	51 ·40	49 ·54	48 ·38	47 ·16	48 ·07	49 ·48	52 ·10	S	55 ·68	55 ·80	55 ·15	53 ·15
6	51 ·30	49 ·52	48 ·32	47 ·18	S	49 ·56	52 ·18	54 ·84	55 ·71	55 ·77	55 ·07	53 ·11
7	S	49 ·49	48 ·27	47 ·15	48 ·15	49 ·66	52 ·31	54 ·94	55 ·74	S	55 ·00	52 ·93
8	51 ·18	49 ·41	48 ·20	S	48 ·20	49 ·76	S	54 ·98	55 ·74	55 ·78	54 ·96	52 ·80
9	51 ·10	49 ·41	48 ·18	47 ·09	48 ·24	49 ·83	52 ·57	55 ·02	S	55 ·75	54 ·86	S
10	51 ·05	49 ·36	48 ·10	47 ·13	48 ·28	S	52 ·68	55 ·05	55 ·78	55 ·74	54 ·74	52 ·72
11	50 ·96	S	S	47 ·16	48 ·33	49 ·98	52 ·77	55 ·20	55 ·78	55 ·72	S	52 ·52
12	50 ·88	49 ·16	48 ·00	47 ·18	48 ·35	50 ·02	52 ·90	S	55 ·80	55 ·73	54 ·74	52 ·51

(II.)—Reading of a Thermometer whose bulb is sunk to the depth of 12·8 feet (12 French feet) below the surface of the soil at the same times.—*concluded.*

Days of the Month, 1866.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°							°	°	°	°	
13	50·86	49·12	47·92	47·23	S	50·10	53·04	55·20	55·80	55·70	54·71	52·40
14	S	49·14	47·81	47·20	48·42	50·20	53·05	55·18	55·85	S	54·61	52·28
15	50·61	49·09	47·79	S	48·46	50·30	S	55·21	55·87	55·71	54·54	52·24
16	50·53	49·10	47·75	47·27	48·52	50·40	53·18	55·22	S	55·68	54·55	S
17	50·46	49·05	47·67	47·31	48·57	S	53·25	55·24	55·86	55·70	54·41	52·08
18	50·38	S	S	47·30	48·62	50·51	53·33	55·35	55·88	55·65	S	52·03
19	50·32	48·94	47·57	47·36	48·66	50·66	53·40	S	55·85	55·68	54·29	51·95
20	50·27	48·94	47·51	47·36	S	50·77	53·46	55·34	55·88	55·71	54·21	51·83
21	S	48·94	47·47	47·40	48·75	50·89	53·60	55·39	55·92	S	54·20	51·80
22	50·15	48·93	47·40	S	48·75	50·96	S	55·41	55·84	55·64	54·17	51·70
23	50·18	48·92	47·38	47·46	48·81	51·10	53·77	55·42	S	55·57	54·11	S
24	50·02	48·87	47·34	47·52	48·82	S	53·86	55·45	55·93	55·60	54·00	51·58
25	49·96	S	S	47·60	48·86	51·26	53·96	55·49	55·94	55·62	S	Christmas Day
26	49·90	48·78	47·26	47·60	48·95	51·36	54·17	S	55·88	55·50	53·90	51·51
27	49·87	48·73	47·25	47·68	S	51·46	54·15	55·52	55·91	55·41	53·82	51·44
28	S	48·63	47·24	47·73	49·17	51·50	54·24	55·51	55·95	S	53·67	51·37
29	49·82		47·20	S	49·08	51·56	S	55·47	55·90	55·40	53·64	51·31
30	49·76		Good Friday.	47·74	49·11	51·70	54·40	55·54	S	55·36	53·53	S
31	49·74		47·14		49·18		54·40	55·56		55·27		51·08
Means.	50·62	49·17	47·80	47·32	48·51	50·42	53·17	55·19	55·82	55·66	54·48	52·25

(III.)—Reading of a Thermometer whose bulb is sunk to the depth of 6·4 feet (6 French feet) below the surface of the soil, at the same times.

Days of the Month, 1866.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	49·30	47·71	45·87	S	49·35	51·86	S	59·60	59·21	57·57	55·36	51·04
2	49·30	47·72	45·88	46·02	49·48	52·01	56·81	59·61	S	57·61	55·20	S
3	49·24	47·66	45·79	46·23	49·52	S	57·16	59·49	59·11	57·58	55·07	50·72
4	49·16	S	S	46·40	49·51	52·31	57·36	59·45	59·12	57·69	S	50·63
5	49·10	47·71	45·53	46·48	49·53	52·70	57·50	S	59·10	57·72	54·91	50·40
6	49·00	47·68	45·36	46·58	S	52·88	57·50	59·33	59·05	57·78	54·83	50·30
7	S	47·72	45·28	46·64	49·45	53·10	57·59	59·35	59·02	S	54·76	50·09
8	48·94	47·67	45·11	S	49·46	53·27	S	59·26	58·99	57·86	54·58	50·13
9	48·82	47·77	45·06	46·78	49·51	53·44	57·70	59·21	S	57·85	54·35	S
10	48·79	47·72	45·00	46·86	49·52	S	57·72	59·12	59·00	57·87	54·30	50·26
11	48·70	S	S	46·94	49·64	53·76	57·74	59·11	58·95	57·82	S	50·26
12	48·49	47·46	44·89	47·02	49·70	53·98	57·85	S	58·93	57·81	54·37	50·21
13	48·25	47·60	44·88	47·11	S	54·21	58·00	59·02	58·90	57·74	54·26	50·12
14	S	47·60	44·77	47·14	49·90	54·48	58·11	58·93	58·91	S	54·10	50·00
15	47·00	47·54	44·68	S	50·00	54·66	S	58·92	58·86	57·53	53·94	49·93
16	47·10	47·38	44·90	47·40	50·03	54·78	58·48	58·88	S	57·39	53·91	S
17	47·10	46·90	44·86	47·35	50·10	S	58·70	58·89	58·72	57·25	53·71	49·87
18	47·23	S	S	47·65	50·11	54·91	58·90	58·96	58·62	57·10	S	49·72
19	47·36	47·00	44·60	47·80	50·10	55·05	59·08	S	58·60	56·90	53·40	49·68
20	47·43	46·98	44·73	47·86	S	55·10	59·20	58·84	58·42	56·70	53·17	49·46
21	S	46·84	44·89	48·02	50·25	55·19	59·40	58·73	58·33	S	53·04	49·55
22	47·61	46·75	45·00	S	50·32	55·15	S	58·80	58·18	56·40	52·81	49·45
23	47·68	46·58	44·96	48·24	50·52	55·25	59·51	58·84	S	56·28	52·58	S
24	47·77	46·45	45·11	48·41	50·63	S	59·60	58·88	58·13	56·30	52·24	49·24
25	47·82	S	S	48·52	50·80	55·53	59·55	58·91	58·04	56·22	S	Christmas Day
26	47·77	46·19	44·98	48·60	51·01	55·71	59·40	S	57·89	56·11	51·93	49·06

(III.)—Reading of a Thermometer whose bulb is sunk to the depth of 6·4 feet (6 French feet) below the surface of the soil at the same times—*concluded.*

Days of the Month, 1866.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
27	47 ·90	46 ·03	45 ·12	48 ·78	*S*	55 ·95	59 ·60	58 ·97	57 ·82	56 ·00	51 ·67	49 ·00
28	*S*	45 ·91	45 ·20	48 ·88	51 ·23	56 ·11	59 ·45	59 ·01	57 ·80	*S*	51 ·50	48 ·91
29	47 ·84		45 ·30	*S*	51 ·40	56 ·30	*S*	59 ·00	57 ·67	55 ·71	51 ·4[illegible]	48 ·[illegible]0
30	47 ·75		Good Friday.	49 ·16	51 ·57	56 ·63	59 ·63	59 ·12	*S*	55 ·34	51 ·27	*S*
31	47 ·76		45 ·63		51 ·69		59 ·62	59 ·18		55 ·50		48 ·78
Means .	48 ·16	47 ·19	45 ·13	47 ·47	50 ·16	54 ·40	58 ·51	59 ·09	58 ·61	57 ·02	53 ·58	49 ·83

(IV.)—Reading of a Thermometer whose bulb is sunk to the depth of 3·2 feet (3 French feet) below the surface of the soil at the same times.

Days of the Month. 1866.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	46 ·00	44 ·98	41 ·90	*S*	49 ·96	53 ·61	*S*	61 ·38	60 ·45	57 ·86	52 ·80	46 ·19
2	45 ·59	45 ·30	41 ·50	45 ·89	49 ·45	53 ·96	61 ·68	61 ·14	*S*	58 ·05	52 ·62	*S*
3	45 ·74	45 ·77	41 ·11	45 ·76	48 ·99	*S*	61 ·30	61 ·02	60 ·12	58 ·17	52 ·74	45 ·44
4	45 ·71	*S*	*S*	45 ·69	48 ·74	55 ·12	60 ·87	61 ·09	59 ·90	58 ·31	*S*	45 ·68
5	45 ·78	45 ·18	40 ·62	45 ·50	48 ·64	56 ·01	60 ·61	*S*	59 ·75	38 ·50	52 ·80	46 ·46
6	45 ·91	45 ·15	40 ·57	45 ·45	*S*	55 ·87	60 ·26	60 ·70	59 ·99	58 ·50	52 ·80	47 ·18
7	*S*	45 ·50	40 ·69	45 ·62	48 ·76	55 ·85	60 ·20	60 ·55	60 ·01	*S*	52 ·91	47 ·71
8	45 ·43	45 ·85	40 ·66	*S*	49 ·00	56 ·02	*S*	60 ·48	59 ·95	58 ·41	52 ·85	47 ·98
9	45 ·28	45 ·73	40 ·78	45 ·92	49 ·27	56 ·44	60 ·01	60 ·31	*S*	58 ·31	52 ·90	*S*
10	45 ·00	45 ·58	40 ·92	46 ·08	49 ·69	*S*	60 ·26	60 ·11	59 ·96	58 ·17	52 ·52	46 ·98
11	44 ·50	*S*	*S*	46 ·11	49 ·99	57 ·90	60 ·86	60 ·05	59 ·90	57 ·91	*S*	46 ·89
12	43 ·92	45 ·34	41 ·16	46 ·21	50 ·18	58 ·25	61 ·50	*S*	59 ·71	57 ·60	51 ·62	46 ·58
13	43 ·45	45 ·06	41 ·40	46 ·52	*S*	58 ·25	61 ·15	59 ·99	59 ·41	57 ·19	51 ·50	46 ·62
14	*S*	44 ·63	41 ·46	46 ·96	50 ·06	58 ·09	62 ·70	60 ·10	59 ·25	*S*	51 ·61	46 ·87
15	42 ·78	44 ·00	41 ·16	*S*	48 ·99	57 ·80	*S*	60 ·23	59 ·20	56 ·26	51 ·34	46 ·88
16	43 ·62	43 ·52	41 ·02	47 ·37	49 ·68	57 ·80	63 ·51	60 ·11	*S*	55 ·73	50 ·90	*S*
17	43 ·97	43 ·59	41 ·12	47 ·58	49 ·65	*S*	63 ·70	60 ·01	58 ·62	55 ·21	50 ·70	46 ·44
18	44 ·22	*S*	*S*	47 ·67	49 ·75	57 ·45	63 ·77	59 ·81	58 ·30	54 ·66	*S*	46 ·20
19	44 ·62	43 ·28	41 ·92	47 ·86	50 ·06	57 ·15	63 ·66	*S*	58 ·11	54 ·64	49 ·71	46 ·32
20	44 ·92	42 ·81	42 ·39	48 ·12	*S*	57 ·00	63 ·41	59 ·67	58 ·00	54 ·61	49 ·16	46 ·46
21	*S*	42 ·39	42 ·56	48 ·45	51 ·08	57 ·05	63 ·21	59 ·93	57 ·97	*S*	48 ·40	46 ·07
22	45 ·37	42 ·24	42 ·50	*S*	51 ·47	57 ·48	*S*	60 ·18	57 ·73	55 ·21	47 ·66	45 ·72
23	45 ·72	42 ·04	42 ·22	48 ·60	51 ·78	58 ·29	62 ·81	60 ·29	*S*	55 ·31	47 ·40	*S*
24	45 ·81	42 ·10	42 ·09	48 ·64	51 ·98	*S*	62 ·78	60 ·39	57 ·27	55 ·15	47 ·40	45 ·21
25	45 ·43	*S*	*S*	48 ·70	52 ·23	59 ·33	62 ·79	60 ·60	57 ·21	54 ·78	*S*	Christmas Day
26	45 ·05	42 ·34	42 ·67	48 ·95	52 ·38	59 ·69	62 ·71	*S*	57 ·00	54 ·45	47 ·50	45 ·27
27	44 ·85	42 ·30	43 ·02	49 ·40	*S*	60 ·19	62 ·50	60 ·91	56 ·99	54 ·63	47 ·33	45 ·41
28	*S*	42 ·23	43 ·59	50 ·09	53 ·01	60 ·68	62 ·39	61 ·15	57 ·16	*S*	47 ·21	45 ·52
29	44 ·78		44 ·15	*S*	53 ·27	61 ·20	*S*	61 ·10	57 ·28	53 ·47	47 ·00	45 ·58
30	44 ·88		Good Friday.	50 ·48	53 ·30	61 ·56	61 ·62	61 ·00	*S*	53 ·10	46 ·54	*S*
31	44 ·82		45 ·31		53 ·36		61 ·67	60 ·65		52 ·81		45 ·43
Means .	44 ·93	44 ·04	41 ·86	47 ·34	50 ·55	57 ·62	62 ·00	60 ·48	58 ·77	56 ·16	50 ·30	46 ·29

(V.)—Reading of a Thermometer whose bulb is sunk to the depth of 1 inch below the surface of the soil, within the case which covers the tops of the deep-sunk Thermometers, at the same times.

Days of the Month, 1866.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	43·5	48·4	35·1	S	47·1	59·7	S	59·0	61·5	60·6	51·5	34·4
2	44·2	48·5	38·3	45·5	45·2	60·8	62·8	64·3	S	59·0	52·9	S
3	44·7	46·1	35·4	46·6	47·5	S	61·5	62·7	58·4	61·4	55·0	45·0
4	46·3	S	S	45·5	47·8	63·4	60·5	61·5	60·7	60·7	S	50·2
5	47·5	44·5	37·2	46·4	49·2	58·7	61·8	S	62·5	58·9	53·0	51·9
6	42·7	48·6	40·0	48·2	S	57·8	60·0	60·5	62·1	58·8	54·5	49·8
7	S	50·5	39·2	46·8	52·5	61·1	60·5	61·5	61·7	S	52·1	48·5
8	45·4	45·2	39·5	S	53·4	63·7	S	60·5	61·1	60·2	54·3	43·0
9	41·3	46·8	41·3	46·5	53·6	65·0	64·4	60·2	S	58·0	48·5	S
10	41·1	47·0	40·2	47·2	53·4	S	67·7	59·9	62·0	57·7	44·8	46·0
11	38·0	S	S	48·8	53·9	64·2	68·8	59·5	59·7	57·0	S	42·7
12	37·3	43·8	42·0	49·5	52·1	62·5	69·3	S	58·0	55·6	48·7	47·0
13	39·5	40·4	41·3	52·9	S	60·5	73·4	63·1	59·0	51·5	53·6	50·3
14	S	40·6	37·1	50·9	50·5	61·0	77·1	62·1	58·7	S	48·6	45·2
15	46·1	40·5	39·4	S	48·9	61·5	S	61·3	59·8	48·4	45·6	45·0
16	45·9	45·0	43·2	50·7	50·7	61·5	68·6	60·5	S	57·6	51·3	S
17	44·5	42·7	44·4	51·1	51·5	S	67·9	59·4	56·1	51·5	44·0	44·7
18	47·3	S	S	51·0	53·5	66·0	66·2	60·0	56·4	51·3	S	48·1
19	47·5	37·0	45·1	52·1	55·3	59·5	66·4	S	59·2	56·0	42·0	47·6
20	47·5	36·9	43·9	53·0	S	60·0	62·4	62·0	57·4	56·5	40·6	36·4
21	S	39·3	40·2	52·5	55·9	64·5	64·5	62·0	57·7	S	40·0	41·9
22	50·2	38·0	38·5	S	55·8	64·1	S	62·0	53·5	57·3	43·2	41·0
23	46·0	44·8	42·4	49·7	56·2	64·1	63·6	62·5	S	53·4	45·2	S
24	42·9	40·1	44·1	50·8	54·1	S	64·8	65·2	56·8	54·5	43·6	43·7
25	42·0	S	S	53·5	53·4	64·7	63·8	64·5	56·8	51·2	S	Christmas Day
26	42·2	41·2	46·0	55·0	58·4	67·1	65·0	S	58·7	51·5	44·0	45·7
27	43·1	40·0	48·2	57·8	S	69·5	63·9	65·8	57·0	48·3	46·0	45·0
28	S	37·3	49·0	59·4	56·1	69·4	65·0	64·1	59·0	S	41·3	45·9
29	45·4		49·7	S	57·3	65·8	S	61·5	61·0	48·7	41·2	45·7
30	42·6		Good Friday.	47·2	55·2	69·3	61·5	59·7	S	52·0	42·3	S
31	46·9		50·1		57·9		58·0	60·2		53·1		37·6
Means.	44·1	43·1	42·0	50·3	52·8	63·3	65·0	51·7	59·0	55·2	47·2	44·9

(VI.)—Reading of a Thermometer within the case covering the deep-sunk Thermometers, whose bulb is placed on a level with their scales, at the same times.

Days of the Month, 1866.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
1	43·5	52·5	33·2	S	44·8	68·3	S	61·0	67·1	61·1	53·4	34·1
2	46·9	47·6	41·3	45·5	42·3	71·4	65·2	70·0	S	59·6	57·0	S
3	47·1	48·3	34·2	49·5	47·2	S	61·5	65·0	62·3	66·6	57·0	50·3
4	48·0	S	S	45·7	55·0	71·0	61·4	65·7	65·4	59·8	S	54·1
5	49·4	47·0	43·5	51·6	57·5	60·4	65·0	S	64·7	57·2	57·6	54·3
6	40·0	54·0	43·9	55·2	S	59·7	65·2	61·5	66·1	60·0	57·5	52·8
7	S	52·4	43·8	46·0	57·4	68·3	64·7	66·5	65·8	S	53·7	47·7
8	46·2	47·2	42·4	S	63·7	74·0	S	64·8	63·5	66·0	56·4	40·5
9	40·6	51·0	46·7	44·0	59·3	79·4	73·3	63·9	S	58·7	48·4	S
10	41·9	49·4	41·2	50·4	56·6	S	79·5	62·5	67·3	58·6	40·6	46·3
11	33·7	S	S	55·4	58·5	71·0	80·1	63·3	61·7	55·7	S	37·3
12	35·2	42·7	47·4	56·8	56·4	64·0	82·0	S	59·5	59·9	51·3	52·0
13	41·5	38·4	40·5	61·5	S	60·9	84·5	70·6	60·4	53·4	55·2	54·0
14	S	43·2	36·2	58·0	52·1	66·9	80·5	63·5	59·9	S	47·5	44·3
15	49·2	40·8	42·2	S	53·1	65·0	S	62·7	66·4	53·6	46·9	44·7

(VI.)—Reading of a Thermometer within the case covering the deep-sunk Thermometers—*concluded.*

Days of the Month, 1866.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d	°	°	°	°	°	°	°	°	°	°	°	°
16	48 ·1	46 ·3	50 ·4	51 ·8	56 ·3	67 ·4	73 ·9	61 ·9	*S*	55 ·2	54 ·7	*S*
17	46 ·6	38 ·3	48 ·2	56 ·5	60 ·8	*S*	72 ·3	62 ·4	59 ·7	56 ·8	40 ·7	46 ·4
18	48 ·8	*S*	*S*	60 ·6	65 ·5	54 ·6	71 ·7	67 ·3	61 ·5	51 ·4	*S*	52 ·0
19	50 ·4	36 ·4	48 ·4	60 ·7	68 ·7	65 ·9	71 ·6	*S*	65 ·5	61 ·0	38 ·9	47 ·3
20	50 ·9	39 ·8	44 ·0	58 ·5	*S*	65 ·9	63 ·0	65 ·2	60 ·3	59 ·5	37 ·9	37 ·8
21	*S*	40 ·4	38 ·1	59 ·6	61 ·9	74 ·1	72 ·1	65 ·8	58 ·5	*S*	41 ·0	39 ·0
22	53 ·6	39 ·8	40 ·7	*S*	62 ·1	70 ·6	*S*	64 ·7	50 ·9	58 ·9	44 ·9	37 ·3
23	46 ·5	48 ·0	47 ·2	55 ·1	67 ·0	74 ·0	68 ·7	70 ·9	*S*	56 ·1	46 ·8	*S*
24	39 ·4	43 ·4	48 ·8	57 ·5	53 ·7	*S*	68 ·0	72 ·1	62 ·3	57 ·6	44 ·3	42 ·6
25	41 ·7	*S*	*S*	64 ·6	58 ·8	73 ·0	65 ·9	72 ·2	62 ·5	46 ·8	*S*	Christmas Day.
26	42 ·7	43 ·3	53 ·4	68 ·7	68 ·8	77 ·5	71 ·4	*S*	60 ·7	53 ·4	44 ·9	47 ·7
27	41 ·2	38 ·4	54 ·5	73 ·4	*S*	83 ·9	65 ·0	69 ·3	59 ·2	50 ·2	47 ·1	45 ·0
28	*S*	35 ·2	55 ·9	70 ·5	68 ·2	75 ·8	69 ·3	67 ·9	66 ·6	*S*	38 ·6	48 ·9
29	46 ·8		57 ·8	*S*	67 ·0	67 ·7	*S*	59 ·5	66 ·2	51 ·5	43 ·5	48 ·2
30	45 ·0		Good Friday.	49 ·1	61 ·1	79 ·6	64 ·1	63 ·3	*S*	53 ·4	41 ·7	*S*
31	49 ·2		52 ·3		64 ·6		53 ·1	65 ·2		45 ·2		32 ·6
Means .	45 ·0	44 ·3	45 ·2	56 ·2	58 ·8	69 ·6	69 ·5	65 ·5	62 ·6	56 ·5	48 ·1	45 ·6

WEEKLY MEANS of READINGS of THERMOMETERS.

1866. Period.		Thermometers sunk in the ground.					Thermometer inclosed in the box which covers the scales of the deep-sunk Thermometers, and placed on a level with their scales.
		Bulb 24 French Feet deep.	Bulb 12 French Feet deep.	Bulb 6 French Feet deep.	Bulb 3 French Feet deep.	Bulb 1 Inch deep.	
	d d						
January	1 to January 7	52·56	51·47	49·18	45·79	44·8	45·8
	8 to 14	52·40	51·01	48·67	44·60	40·4	39·9
	15 to 21	52·32	50·43	47·20	44·02	46·5	49·0
	22 to 28	52·17	50·01	47·76	45·37	44·4	44·2
	29 to February 4	52·02	49·72	47·74	45·09	46·3	48·2
February	5 to 11	51·86	49·46	47·71	45·50	47·1	50·2
	12 to 18	51·65	49·11	47·41	44·36	42·2	41·6
	19 to 25	51·46	48·92	46·77	42·48	39·4	41·3
	26 to March 4	51·26	48·62	45·95	41·90	37·9	37·6
March	5 to 11	51·14	48·24	45·22	40·71	39·6	43·6
	12 to 18	51·00	47·82	44·83	41·22	41·2	44·2
	19 to 25	50·85	47·45	44·88	42·28	42·4	44·5
	26 to April 1	50·73	47·22	45·25	43·75	48·6	54·8
April	2 to 8	50·54	47·10	46·39	45·65	46·5	48·9
	9 to 15	50·37	47·17	46·98	46·30	49·3	54·4
	16 to 22	50·21	47·33	47·68	47·84	51·7	58·0
	23 to 29	50·07	47·60	48·57	49·06	54·4	65·0
	30 to May 6	49·90	47·86	49·43	49·38	47·3	49·3
May	7 to 13	49·82	48·26	49·55	49·48	53·1	58·6
	14 to 20	49·75	48·54	50·04	49·70	51·7	59·4
	21 to 27	49·71	48·82	50·59	51·82	55·6	62·1
	28 to June 3	49·70	49·19	51·63	53·42	57·8	66·8
June	4 to 10	49·70	49·62	52·95	55·89	61·6	68·8
	11 to 17	49·70	50·17	54·31	58·02	61·9	65·9
	18 to 24	49·74	50·82	55·11	57·40	63·0	67·5
	25 to July 1	49·82	51·47	56·04	60·44	67·6	76·3
July	2 to 8	49·88	52·03	57·32	60·82	61·2	63·0
	9 to 15	50·05	52·84	57·85	61·08	70·1	80·0
	16 to 22	50·14	53·37	58·96	63·54	66·0	60·8
	23 to 29	50·29	54·02	59·52	62·66	64·3	68·0
	30 to August 5	50·45	54·57	59·57	61·32	61·2	63·2
August	6 to 12	50·65	55·00	59·23	60·37	60·4	63·8
	13 to 19	50·84	55·23	58·93	60·04	61·1	61·4
	20 to 26	51·10	55·42	58·83	60·18	63·0	68·6
	27 to September 2	51·26	55·53	59·08	60·88	62·1	65·4
September	3 to 9	51·41	55·69	59·06	59·95	61·1	64·6
	10 to 16	51·62	55·81	58·93	59·57	59·5	62·5
	17 to 23	51·79	55·87	58·48	58·12	56·7	59·4
	24 to 30	51·95	55·92	57·89	57·15	58·2	62·9
October	1 to October 7	52·10	55·82	57·66	58·23	59·9	60·7
	8 to 14	52·24	55·74	57·83	57·93	56·7	58·6
	15 to 21	52·35	55·69	57·15	55·19	53·6	56·8
	22 to 28	52·44	55·56	56·22	54·82	52·7	53·8
	29 to November 4	52·55	55·29	55·36	52·92	52·2	53·3
November	5 to 11	52·63	54·96	54·67	52·80	51·2	52·4
	12 to 18	52·67	54·59	54·05	51·28	48·6	49·4
	19 to 25	52·68	54·16	52·87	48·29	42·4	42·3
	26 to December 2	52·70	53·66	51·47	46·96	41·5	41·7
December	3 to 9	52·73	53·09	50·38	46·74	48·0	49·9
	10 to 16	52·69	52·45	50·13	46·80	46·0	46·4
	17 to 23	52·63	51·90	49·62	46·20	43·3	43·6
	24 to 31	52·55	51·38	48·98	45·42	43·9	44·2

ABSTRACT OF THE CHANGES OF THE DIRECTION OF THE WIND, AS DERIVED FROM OSLER'S ANEMOMETER.

By *direct* motion, in the following statements, is meant that the change of the direction of the wind was in the order N., E., S., W., N., &c., by *retrograde* is meant in the order N., W., S., E., N., &c.

1865. Dec. 31^{d}. 12^{h}. The direction of the wind was E.
1866. Jan. 31. 12. ,, ,, S.W., which implies a direct motion of 135°.

On Jan. 10. 21. 10^{m}, 12^{d}. 2^{h}. 30^{m}, the trace was shifted to the next set of lines upwards ; on Jan. 27^{d}. 8^{h}. 10^{m}, the trace was shifted to the next set of lines downwards, implying retrograde motion of 720°, and direct motion of 360°.

Therefore the whole excess of retrograde motion in the month of January was 225°.

1866. Jan. 31^{d}. 12^{h}. The direction of the wind was S.W.
Feb. 28. 12. ,, ,, N., which implies a direct motion of 135°.

On Feb. 11. 1. 30^{m}, 16^{d}. 9^{h} 30^{m}, 21^{d}. 22^{h}, the trace was shifted to the next set of lines downwards; on Feb. 20^{d}. 2^{h}. 40^{m}, 27^{d}. 22^{h}, the trace was shifted to the next set of lines upwards, implying direct motion of 1080°, and retrograde motion of 720°.

Therefore the whole excess of direct motion in the month of February was 495°.

1866. Feb. 28^{d}. 12^{h}. The direction of the wind was N.
March 31. 12. ,, ,, N.W., which implies a retrograde motion of 45°.

On March 5. 20. 45^{m}, 31^{d}. 3^{h}. 10^{m}, the trace was shifted to the next set of lines downwards ; on March 7^{d}. 22^{h}, 20^{d}. 22^{h}, the trace was shifted to the next set of lines upwards, implying direct motion of 720°, and retrograde motion of 720°.

Therefore the whole excess of retrograde motion in the month of March was 45°.

1866. March 31^{d}. 12^{h}. The direction of the wind was N.W.
April 30. 12. ,, ,, N.E., which implies a direct motion of 90°.

On April 1. 22, 7^{d}. 3^{h}. 10^{m}, 24^{d}. 22^{h}, the trace was shifted to the next set of lines upwards ; on April 3^{d}. 22^{h}, 6^{d}. 9^{h}. 30^{m}, 21^{d}. 22^{h}. the trace was shifted to the next set of lines downwards, and on 26^{d}. 22^{h}, to the second set of lines downwards : implying retrograde motion of 1080°, and direct motion of 1800°.

Therefore the whole excess of direct motion in the month of April was 810°.

1866. April 30^{d}. 12^{h}. The direction of the wind was N.E.
May 31. 12. ,, ,, E., which implies a retrograde motion of 315°.

On May 4. 22, 7^{d}. 9^{h}. 10^{m}, 16^{d}. 22^{h}, 29^{d}. 22^{h}, the trace was shifted to the next set of lines downwards, and on 30^{d}. 2^{h}. 40^{m}, to the second set of lines downwards ; on May 14^{d}. 8^{h}. 30^{m}, 17^{d}. 22^{h}, 18^{d}. 2^{h}. 30^{m}, 22^{d}. 22^{h}, the trace was shifted to the next set of lines upwards, implying direct motion of 2160°, and retrograde motion of 1440°.

Therefore the whole excess of direct motion in the month of May was 405°.

1866. May 31^{d}. 12^{h}. The direction of the wind was E.
June 30. 12. ,, ,, S.W., which implies a direct motion of 135°.

On June 2. 22, 21^{d}. 22^{h}, 24^{d}. 8^{h}, 27^{d}. 2^{h}. 40^{m}, 27^{d}. 10^{h}, 28^{d}. 3^{h}. 20^{m}, 28^{d}. 22^{h}, 29^{d}. 22^{h}, the trace was shifted to the next set of lines downwards ; on June 27^{d}. 22^{h}, the trace was shifted to the next set of lines upwards, implying direct motion of 2880°, and retrograde motion of 360°.

Therefore the whole excess of direct motion in the month of June was 2655°.

1866. June 30^{d}. 12^{h}. The direction of the wind was S.W.
July 31. 12. ,, ,, N., which implies a direct motion of 135°.

On July 6. 22, 10^{d}. 3^{h}, 12^{d}. 0^{h}, 13^{d}. 22^{h}, 14^{d}. 9^{h}. 30^{m}, the trace was shifted to the next set of lines downwards ; on July 7^{d}. 8^{h}, 15^{d}. 0^{h}, 18^{d}. 0^{h}. 20^{m}, 19^{d}. 9^{h}. 30^{m}, the trace was shifted to the next set of lines upwards, implying direct motion of 1800°, and retrograde motion of 1440°.

Therefore the whole excess of direct motion in the month of July was 495°.

1866. July $\overset{d}{31}$. $\overset{h}{12}$. The direction of the wind was **N.**
Aug. 31. 12. ,, ,, **S.S.W.**, which implies a retrograde motion of 157½°.
On Aug. 12. 5, 19^{d}. 22^{h}. 25^{d}. 22^{h}, 29^{d}. 1^{h}. 20^{m}, the trace was shifted to the next set of lines upwards ; on July 13^{d}. 22^{h}, 22^{d}. 9^{h}. 20^{m}, the trace was shifted to the next set of lines downwards, implying retrograde motion of 1440°, and direct motion of 720°.
Therefore the whole excess of retrograde motion in the month of August was 877½°.

1866. Aug. $\overset{d}{31}$. $\overset{h}{12}$. The direction of the wind was **S.S.W.**
Sept. 30. 12. ,, ,, **N.**, which implies a direct motion of 157½°.
On Sept. 9. 9. 20^{m}, the trace was shifted to the second set of lines downwards ; and on Sept. 8^{d}. 22^{h}, 26^{d}. 23^{h}. 40^{m}, 27^{d}. 2^{h}. 0^{m}, 28^{d}. 22^{h}, the trace was shifted to the next set of lines downwards ; on Sept. 5^{d}. 21^{h}, 21^{d}. 22^{h}, 26^{d}. 22^{h}, 28^{d}. 2^{h}. 30^{m}, 29^{d}. 9^{h}. 15^{m}, the trace was shifted to the next set of lines upwards, implying direct motion of 2160°, and retrograde motion of 1800°.
Therefore the whole excess of direct motion in the month of September was 517½°.

1866. Sept. $\overset{d}{30}$. $\overset{h}{12}$. The direction of the wind was **N.**
Oct. 31. 12. ,, ,, **S.W.**, which implies a retrograde motion of 135°.
On Oct. 2. 22, 12^{d}. 22^{h}, the trace was shifted to the next set of lines downwards ; implying direct motion of 720°.
Therefore the whole excess of direct motion in the month of October was 585°.

1866. Oct. $\overset{d}{31}$. $\overset{h}{12}$. The direction of the wind was **S.W.**
Nov. 30. 12. ,, ,, **E.**, which implies a direct motion of 225°.
Therefore the whole excess of direct motion in the month of November was 225°.

1866. Nov. $\overset{d}{30}$. $\overset{h}{12}$. The direction of the wind was **E.**
Dec. 31. 12. ,, ,, **W.S.W.**, which implies a retrograde motion of 202½°.
On Dec. 9. 1. 30^{m}, 11^{d}. 9^{h}. 15^{m}, 15^{d}. 9^{h}. 30^{m}, 19^{d}. 9^{h}. 40^{m}, the trace was shifted to the next set of lines downwards; on Dec. 31^{d}. 9^{h}. 40^{m}, the trace was shifted to the next set of lines upwards, implying direct motion of 1440°, and retrograde motion of 360°.
Therefore the whole excess of direct motion in the month of December was 877½°.

The whole excess of direct motion to the end of the year was 5917½°.

The revolution-counter which is attached to the vertical spindle of the vane, whose readings increase with change of direction of the wind in the order **N.**, **E.**, **S.**, **W.**, &c., or in *direct* motion, and decrease with change of direction in the order **N.**, **W.**, **S.**, **E.**, &c., or in *retrograde* motion, gave the following readings :—

	revs.
On 1865, December 31^{d}. 12^{h}	43·25
On 1866, December 31^{d}. 12^{h}	59·70

Implying an excess of direct motion, during the year, of 16·45 revolutions, or 5922°.

AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1866.

1866, MONTH.	Monthly Amount of Rain collected in each Gauge.							
	Self-registering Gauge of Osler's Anemometer.	Second Gauge at Osler's Anemometer.	On the Roof of the Octagon Room.	On the Roof of the Library.	On the Roof of the Photographic Thermometer Shed.	Crosley's.	Cylinder partly sunk in the Ground read daily.	Cylinder partly sunk in the Ground read Monthly
	in.	in.	in.	in.	in.	in.	in.	in.
January	1 ·20	1 ·42	(1 ·32)	2 ·23	3 ·43	3 ·08	3 ·68	3 ·48
February	2 ·01	2 ·14	2 ·67	2 ·66	3 ·77	3 ·55	4 ·03	3 ·90
March	0 ·88	0 ·90	1 ·01	1 ·08	1 ·45	1 ·28	1 ·63	1 ·56
April	1 ·43	1 ·47	1 ·62	2 ·14	2 ·40	2 ·16	2 ·44	2 ·44
May	1 ·26	1 ·37	1 ·50	1 ·71	1 ·89	1 ·76	1 ·94	1 ·95
June	2 ·80	2 ·87	3 ·13	3 ·36	3 ·62	3 ·55	3 ·64	3 ·57
July	...	...	1 ·58	1 ·39	1 ·60	1 ·68	1 ·62	1 ·58
August	...	...	2 ·06	2 ·01	2 ·36	2 ·44	2 ·42	2 ·40
September	2 ·76	2 ·84	3 ·19	3 ·09	3 ·75	3 ·91	3 ·90	3 ·90
October	1 ·74	1 ·83	2 ·02	2 ·00	2 ·06	1 ·80	2 ·09	2 ·05
November	0 ·77	0 ·74	1 ·01	1 ·04	1 ·41	1 ·30	1 ·48	1 ·48
December	0 ·90	0 ·93	1 ·43	1 ·14	1 ·61	1 ·57	1 ·85	1 ·78
Sums	...	...	22 ·54	23 ·85	29 ·35	28 ·08	30 ·72	30 ·09

The heights of the receiving surfaces are as follows:

	Above the Mean Level of the Sea. Ft.	In.	Above the Ground. Ft.	In.
The Two Gauges at Osler's Anemometer	205	6	50	8
Gauge on the Roof of the Octagon Room	193	2½	38	4½
Gauge on the Roof of the Library	177	2	22	4
Gauge on the Roof of the Photographic Thermometer Shed	164	10	10	0
Crosley's Gauge	156	6	1	8
The Two Cylinder Gauges partly sunk in the Ground	155	3	0	5

At the end of the month of January it was found that the Gauge on the Roof of the Octagon Room was leaky, and it was therefore replaced by a new gauge.

The two Gauges at Osler's Anemometer were partly covered over during the months of July and August: the Anemometer then being in course of alteration.

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS

OF

LUMINOUS METEORS.

1866.

OBSERVATIONS OF LUMINOUS METEORS

Month and Day, 1866.	Greenwich Mean Solar Time.	Observer.	Apparent Size of Meteor in Star-Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	Number for Reference.
	h m s						..	
January 6	8. 48. 0	H.	3	Blue	Momentary	None	10	1
,,	8. 54. 0	H.	2	Blue	1	. . .	10	2
,,	9. 59. 0	W.	> Jupiter	Brilliant blue	5	Yellow, 3 s.	20	3
January 8	5. 54. 0	N.	4	Bluish-white	< 0·5	None	6	4
,,	9. 22. 0	W.	2	Bluish	3	None	20	5
,,	9. 46. 0	W.	3	White	1	None	6	6
,,	10. 5. 0	W.	2	Bluish-white	2	None	5	7
January 9	9. 14. 0	W.	2	Bluish-white	0·5	None	6	8
,,	9. 35. 0	W.	2	Bluish-white	2	None	10	9
,,	9. 38. 0	W.	1	White	1	None	8	10
January 11	8. 30. 0	T.	3	Blue	0·5	None	3	11
,,	9. 53. 30	J.	2, increasing till > Sirius.	Yellow	3	Fine	35	12
January 15	9. 19. 0	W.	1	Bluish-white	Momentary	None	10	13
,,	9. 47. 0	W.	2	White	1	None	8	14
January 16	9. 53. 30	J.	2	Yellow	Momentary	Small	12	15
,,	10. 4. 0	J.	2	Yellow	Momentary	Slight	6	16
January 19	9. 24. 15	W.	3	Bluish-white	1	None	10	17
February 2	6. 56. 0	N.	1	Bright blue	1	. . .	15	18
February 7	8. 23. 0+	W.	2	Bluish-white	1	None	8	19
February 10	7. 30. 0	T.	3	Bluish	0·5	None	5	20
,,	9. 16. 0	H.	> Sirius	Brilliant blue	Very short	None	10	21
,,	12. 52. 0	N.	2	Bluish-white	Momentary	None	8	22
February 13	9. 18. 5	W.	2	Yellow	< 0·5	None	12	23
,,	9. 25. 35	N.	4	Bluish-white	0·5	None	8	24
,,	9. 45. 55	N., J.	3	Bluish-white	0·5	None	6	25
March 1	9. 16. 0	N.	= Venus	Yellowish-white	0·7	Fine	7	26
March 6	11. 9. 51	N.	3	White	0·7	None	..	27
March 8	8. 15. 43	N.	3	White	< 1	None	30	28
March 12	11. 23. 0	J.	3	Yellow	Momentary	None	3	29
,,	11. 33. 0	J.	1	Bluish	2	Fine	10	30
,,	11. 58. 30	J.	2	Bluish	0·5	Slight	5	31
March 13	8. 26. 0	N.	2	Bluish-white	0·7	Train	11	32
March 14	10. 3. 0	H.	3	Blue	1·5	None	15	33
,,	10. 7. 0	H.	2	Blue	1	None	12	34
,,	10. 9. 0	H.	2	Bluish-white	Short	None	15	35
March 16	8. 16. 0	N.	2	Bluish-white	0·5	None	7	36
,,	10. 12. 0	W.	= Rigel	Yellow	3	Fine, 1 s.	15	37
March 17	10. 47. 0	N., W.	= Venus	Yellow	1	Fine	15	38
,,	10. 52. 0	W.	2	Bluish-white	0·5	None	8	39
,,	11. 0. 0	N.	3	Bluish-white	0·5	None	10	40
April 10	9. 29. 0	H.	2	Blue	1	None	10	41

in the YEAR 1866.

Number for Reference.	Path of Meteor through the Stars.
1	From direction of ζ Cassiopeiæ towards α Andromedæ.
2	From direction of π Cygni towards γ Cygni.
3	From a point about 1° above and North of μ Cygni, disappeared a few degrees North of ε Pegasi.
4	From the direction of α Orionis, passed between ζ and κ Orionis.
5	From a point about 3° or 4° North of κ Cassiopeiæ, fell towards δ Cephei.
6	From a point a little above ξ Ursæ Minoris, passed τ Ursæ Minoris, towards θ Draconis.
7	From about 1° above and West of η Orionis, disappeared a few degrees below and East of β Orionis.
8	From a point a little above Sirius, disappeared about 1° above and beyond β Canis Majoris.
9	From about 5° above and South of α Pegasi, disappeared about 5° below that star. Seen through trees.
10	From a little above *e* Lacertæ, passed midway between *e* and *g* Lacertæ, and disappeared a little below *n* Lacertæ.
11	From a point near ε Cygni towards *q* Vulpeculæ.
12	From a point a few degrees below the Pleiades to α Piscium ; center of path opposite γ Arietis.
13	From a point 1° or 2° above β Ursæ Minoris, passed γ Ursæ Minoris towards η Draconis.
14	From about 3° above Aldebaran, passed on the East side of that star to a point 1° East of *c* Tauri.
15	From a point ⅓rd of the distance from θ Andromedæ, towards β Andromedæ, passed midway between δ and α Andromedæ.
16	Passed horizontally from E. to W. between the Pleiades and ζ Persei.
17	From the direction of Pollux, midway between γ and ν Geminorum, towards α Orionis.
18	Passed parallel to Orion's belt, across γ Eridani; center of path near that star.
19	From a point a few degrees East of 12 Can. Venat., towards η Ursæ Maj., parallel to the line joining those stars.
20	Appeared about 2° below A Draconis and disappeared between ζ and θ Draconis.
21	From a point 2° or 3° West of α Cephei towards α Cygni.
22	From R Ursæ Majoris towards Castor. (Faint auroral light at this time).
23	From the direction of ε Cassiopeiæ, passed rapidly across the zenith, midway between Capella and ε Aurigæ, towards θ Aurigæ.
24	From the direction of λ Ursæ Majoris, passed across α Ursæ Majoris to a point 2° or 3° beyond that star.
25	From the direction of γ Cephei, passed across κ Cassiopeiæ, and disappeared at η Cassiopeiæ.
26	Appeared about 10° North of α Ursæ Majoris, disappeared about 12° North of δ Ursæ Majoris.*
27	Directed from ε Virginis, passed about 7° below α Hydræ; center of path nearly opposite that star.
28	Fell vertically from a point near δ Persei almost to β Trianguli.
29	From a point a few degrees below ε Cassiopeiæ, fell nearly vertically.
30	Directed from β Leonis, below δ Virginis, passed midway between ζ and γ Virginis.
31	Point of appearance midway between β and δ Serpentis ; path S. to N., nearly horizontal.
32	Passed across κ Draconis and disappeared close to α Draconis; sparks at disappearance.
33	From a point just below δ Draconis, perpendicularly downwards.
34	From a point about 3° West and above Polaris, fell towards γ Cephei.
35	From the direction of χ Ursæ Majoris to a point just below α Ursæ Majoris.
36	From a point near ε Geminorum, fell towards β Tauri.
37	Fell from a point a little above χ Persei, and passed a little North of φ Andromedæ ; path slightly curved.
38	Directed from α Ursæ Majoris, passed across δ Cassiopeiæ and about 5° farther.
39	Passed κ Lyræ towards β Lyræ.
40	From the direction of θ Geminorum, passed across ξ Geminorum and 4° beyond.
41	From the direction of β Ursæ Minoris to a point between η and ζ Draconis.

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* The Moon was shining brightly through cirro-cumulus clouds, and the observer believed that the meteor was seen on this side of the clouds.

OBSERVATIONS OF LUMINOUS METEORS

Month and Day, 1866.		Greenwich Mean Solar Time.	Observer.	Apparent Size of Meteor in Star-Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	Number for Reference.
		h m s						°	
April	11	8. 45. 0	W.	3	Bluish-white	1	None	6	1
April	13	9. 57. 0	W.	3	Bluish-white	0·5	None	5	2
April	14	9. 21. 0	H.	4	Bluish-white	Short	None	20	3
	„	9. 36. 0	H.	1	Bluish-white	2	None	25	4
April	16	10. 3. 0	J.	2	Bluish	1	None	10	5
	„	10. 16. 0	W.	3	Bluish-white	1	None	5	6
April	17	8. 42. 0	H.	3	Blue	1	None	15	7
	„	9. 13. 0	H.	2	Blue	2	Faint	12	8
April	18	10. 41. 0	N.	2	Bluish-white	1	Fine	9	9
April	21	10. 21. 0	W.	3	Bluish-white	0·5	None	5	10
	„	10. 23. 0	W.	2	White	1	None	3	11
May	7	9. 40. 0	T.	3	Blue	0·5	. . .	3	12
	„	9. 53. 0	W.	3	White	1	None	10	13
May	16	9. 57. 0	W., F.	2	Bluish-white	3	None	30	14
	„	11. 0. 0	N.	= Venus	Bluish-white	1	. . .	..	15
May	17	10. 38. 1	N.	= Venus	Blue	2	None	25	16
	„	10. 41. 36	N.	3	Bluish-white	0·4	None	5	17
	„	11. 8. 36	N.	4	White	0·5	None	6	18
May	18	10. 46. 44	N., W.	3	Bluish-white	0·4	None	12	19
	„	10. 51. 34	W.	3	Bluish-white	0·3	None	5	20
	„	10. 53. 30	H.	3	Blue	1	None	15	21
	„	11. 5. 45	J., W.	2	Bluish-white	1	None	10	22
	„	11. 11. 9	N., J.	< Venus	Yellowish-white	1·5	Fine, 1^{s}.	40	23
	„	11. 11. 34	N., J.	1	Bluish-white	1	Fine	18	24
	„	11. 29. 49	N., J., W.	1	Bluish-white	1·5	Fine	14	25
	„	11. 40. 52	N.	1	Bluish-white	0·5	. . .	8	26
	„	11. 41. 59	N., W.	1	Bluish-white	1	Fine	..	27
	„	11. 44. 19	N., W.	1	Yellow	1	Fine	20	28
	„	11. 45. 14	N., W.	2	Bluish-white	0·5	None	7	29
	„	11. 47. 49	W.	1	Bluish-white	1	None	5	30
	„	12. 0. 0	W.	..	Bluish-white	0·5	None	6	31
	„	12. 26. 25	W.	2	Bluish-white	1	None	10	32
	„	12. 30. 0	J.	2	Bluish	0·5	Fine	20	33
	„	13. 1. 0	N.	1	Bluish-white	1	. . .	20	34
June	2	9. 33. 0	H., T., J., W.	2	Bluish-white	. . .	None	10	35
June	16	10. 5. 0	W.	= Saturn	Yellowish-white	. . .	Fine	15	36
June	21	10. 0. 0	T.	1	Bluish-white	0·5	None	8	37
June	24	11. 9. 35	N.	= Jupiter	Yellowish-white	2	Fine	..	38
July	9	12. 10. 0	W.	= Saturn	Bluish-white	. . .	None	10	39
July	12	11. 21. 0	H.	3	Blue	Short	None	8	40
July	17	11. 58. 21	N.	4	White	0·4	None	..	41
	„	11. 59. 49	N.	2	Bluish-white	0·5	None	9	42
	„	12. 3. 0	F.	1	Bluish-white	1·5	Train	..	43

in the YEAR 1866—*continued.*

Number for Reference.	Path of Meteor through the Stars.
1	Passed midway between δ and λ Persei ; center of track between those stars.
2	From the direction of α Ursæ Majoris, disappeared near θ Ursæ Majoris.
3	Fell vertically from a point 2° East and above Polaris.
4	From γ Cancri, passed across ε and η Hydræ to a point a little above and South of α Hydræ.
5	Appeared midway between δ and η Hydræ, and passed towards *q* Monocerotis.
6	From a point about midway between η and γ Virginis.
7	From near *h* and *m* Canum Venaticorum towards γ Boötis.
8	From a point about 4° from *d* Canum Venaticorum, passed across that star towards ε Ursæ Majoris.
9	Passed across θ and β Cancri.
10	From the direction of ζ Boötis, passed δ Boötis towards ε Boötis.
11	Moved on a path parallel to a line joining α and γ Coronæ Borealis.
12	Fell vertically from a point midway between α and β Libræ.
13	From a point 1° or 2° East of β Libræ, fell past γ Libræ and disappeared near β Scorpii ; wavering motion.
14	From a point a little below and West of π Leonis passed, midway between ε and η Hydræ towards Procyon.
15	In the South ; above Scorpio.
16	First seen 7° or 8° below β Leonis ; moved W., passing close to Regulus ; the view of the end of path interrupted.
17	Directed from Arcturus, disappeared close to β Virginis.
18	From the direction of ε Virginis ; disappeared near ι Virginis.
19	Fell vertically from the direction of ξ Boötis, passed φ Boötis towards Saturn.
20	Moved past Polaris and ω Cephei ; the track of the meteor parallel to the line joining these stars.
21	From the direction of ε Boötis, across π and ζ Boötis.
22	From a point 1° or 2° South of δ Crateris, vertically to a point about the same distance from β Hydræ.
23	Passed from near β Ursæ Minoris to a point near *q* Camelopardali.
24	From ε Lyræ to a point near ο Cygni.
25	From ο Cephei to a point 2° East of α Cassiopeiæ.
26	From γ Draconis towards θ Cephei.
27	From β to ζ Ophiuchi.
28	From α Coronæ Borealis, passed midway between ξ and ο Boötis.
29	Moved past γ and β Ophiuchi ; the track of the meteor parallel to the line joining these stars.
30	Fell vertically past η and ν Boötis.
31	Moved past α and ε Ophiuchi.
32	From δ Coronæ Borealis, past π Herculis towards γ Herculis.
33	From the direction of β Ursæ Majoris, passed between μ and λ Ursæ Majoris to a point near *d* Leonis Minoris.
34	From a point 2° or 3° left of λ Ursæ Majoris fell vertically towards horizon.
35	Described a slightly curved path about 8° above β Libræ.
36	From a point about 5° above ζ Ophiuchi, passed about the same distance from η Ophiuchi.
37	Passed horizontally between α and β Aquilæ, $\frac{1}{3}$rd of distance from β Aquilæ.
38	From a point a few degrees below β Ursæ Majoris to μ Ursæ Majoris.
39	From the direction of δ Aquilæ towards β Ophiuchi.
40	From a point midway between α and ν Cygni to a point 2° left of ε Cygni.
41	From θ Aquilæ to λ Aquilæ.
42	Moved from the direction of γ Cygni, disappeared near γ Aquilæ.
43	From 8° below η Ursæ Majoris, passed a few degrees above 12 Canum Venaticorum ; the center of track opposite that star.

OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1866.	Greenwich Mean Solar Time.	Observer.	Apparent Size of Meteor in Star-Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	Number for Reference.
	h m s						°	
July 17	12. 8. 12	N.	2	Bluish-white	0·5	. . .	15	1
„	12. 10. 52	F.	2	Bluish-white	2	None	. .	2
„	12. 22. 7	N., F.	1	Bluish-white	0·7	Slight	20	3
„	12. 28. 42	F.	4	Bluish-white	2	None	. .	4
„	12. 38. 15	N.	3	Bluish-white	0·4	None	. .	5
„	12. 43. 1	N.	> 1	Blue	1	Fine	10	6
„	12. 48. 30	F.	2	Bluish-white	. . .	. . .	. .	7
„	12. 49. 2	N.	3	Bluish-white	0·5	None	. .	8
„	12. 55. 49	N.	3	Bluish-white	0·5	None	. .	9
„	13. 14. 0	N.	1	Bluish-white	2	Train	30	10
„	13. 18. 26	N.	4	Bluish-white	. . .	. . .	. .	11
July 19	11. 15. 52	N.	2	Bluish-white	1	Train	. .	12
„	11. 38. 47	N.	2	Bluish-white	0·7	Train	15	13
July 20	11. 26. 48	J.	2	Bluish	0·5	None	5	14
„	11. 40. 0	N.	3	Bluish-white	0·5	None	7	15
„	11. 48. 41	F.	4	Bluish-white	0·5	. . .	. .	16
„	11. 50. 20	N., S.	2	Bluish-white	0·8	Train	15	17
„	12. 11. 20	N.	1	Bluish-white	1	Train	12	18
„	12. 14. 15	S.	3	Bluish-white	0·5	None	10	19
„	12. 21. 5	J.	3	Bluish	. . .	None	5	20
„	12. 22. 27	N., F.	3	Bluish-white	0·4	None	5	21
„	12. 25. 1	W., S.	= Jupiter	Yellowish	1	Yellow	. .	22
„	12. 40. 40	F.	2	Bluish-white	0·5	. . .	. .	23
„	12. 41. 15	W., S.	3	Bluish-white	0·5	None	3	24
„	12. 44. 31	N., F.	< Jupiter	Blue	2	Fine 1^{s}	20	25
„	12. 45. 17	N., F., S.	4	Bluish-white	0·5	None	12	26
„	12. 47. 55	W., J.	3	Bluish-white	0·5	Slight	10	27
July 29	10. 15. 0	T.	3	Blue	0·5	. . .	6	28
„	10. 40. 0	T.	3	Blue	0·5	. . .	4	29
„	10. 49. 30	J.	1	Bluish	2	Fine	30	30
„	11. 2. 0	H.	2	Blue	2	Faint	20	31
„	11. 11. 0	J.	2	Bluish	0·5	None	10	32
„	11. 45. 0	H., J.	> 1	Blue	2	Faint	20	33
„	11. 55. 0	J.	2	Blue	0·5	Fine	6	34
„	12. 2. 0	J.	2	Blue	1	None	9	35
„	12. 17. 0	J.	1	White	1	None	8	36
„	12. 26. 30	H., J.	> 1	Blue	2	None	30	37
„	12. 27. 30	J.	2	Blue	0·5	None	8	38
„	12. 33. 0	H.	1	Bluish-white	1	Faint	12	39
„	12. 38. 30	H.	2	Blue	1	None	7	40
„	12. 52. 0	J.	3	Blue	0·5	None	4	41
„	12. 57. 15	H.	= Jupiter	Yellow	5	Fine	35	42
„	13. 9. 30	H.	2	Bluish-white	2	Faint	25	43
„	13. 12. 0	H., J.	1	Brilliant blue	1	None	6	44
„	13. 14. 0	H., J.	2	Blue	2	None	14	45
„	13. 18. 0	J.	2	Blue	2	None	18	46
„	13. 21. 30	H.	2	Blue	Short	None	20	47
„	13. 26. 45	H.	1	Brilliant blue	1	None	6	48
„	13. 27. 30	H., J.	2	Blue	2	None	15	49
„	13. 39. 0	J.	2	Blue	1	Fine	12	50
„	13. 42. 0	J.	1	Blue	2	Fine	7	51
„	13. 42. 0	H.	1	Blue	1	None	12	52
„	13. 43. 0	H.	2	Blue	1	None	10	53
„	13. 51. 0	H.	2	Bluish-white	1	None	8	54
„	14. 1. 0	H.	2	Bluish-white	1	Faint	10	55
„	14. 2. 0	H.	1	Blue	1	None	25	56
„	14. 8. 30	J.	2	Blue	1	None	10	57
„	14. 11. 0	J.	2	Blue	0·5	Slight	6	58

in the YEAR 1866—*continued.*

Number for Reference.	Path of Meteor through the Stars.
1.	Directed from ε Aquilæ, from a point 10° below that star, passed within 2° or 3° of γ Ophiuchi.
2	From a point near ζ Ursæ Majoris, disappeared close to 12 Canum Venaticorum.
3	Directed from ε Aquilæ, passed almost midway between α Ophiuchi and α Herculis, then across ι Ophiuchi.
4	Curved path from a point near η Ursæ Majoris towards 12 Canum Venaticorum.
5	From the vicinity of β Aquilæ to δ Aquilæ.
6	Directed from β Aquarii; center of path opposite Jupiter, 5° below that planet.
7	From a point near α Ursæ Majoris, disappeared close to γ Ursæ Minoris.
8	From a point near ζ Cygni, disappeared near λ Pegasi.
9	Directed from ϵ Cygni, disappeared near β Aquilæ.
10	From a point not far distant from ε Boötis to a point 10° or 12° below 12 Canum Venaticorum.
11	From a point midway between α and β Pegasi to a point midway between α Andromedæ and γ Pegasi.
12	From a point midway between γ and δ Cygni to θ Herculis.
13	Directed from ϵ Cassiopeiæ, disappeared near *c* Camelopardali.
14	Appeared between α and γ Cygni passing towards ξ Cygni.
15	From near δ Herculis towards α Coronæ Borealis.
16	From 10° West and above η Ursæ Majoris, passed midway between η and ζ Urs. Maj., and disappeared 2° or 3° below δ Urs. Maj.
17	From a point near ο Cephei, fell at inclination 15° from vertical.
18	From a point about 10° West of η Ursæ Majoris, fell vertically.
19	From a point immediately above ι Ursæ Majoris to a point as much below ο Ursæ Majoris.
20	From a point about 3° West and below δ Ursæ Majoris fell nearly vertically on the West side of γ Ursæ Majoris.
21	Directed from ι Pegasi, disappeared near λ Pegasi.
22	Fell vertically from a point about 5° West of γ Equulei to a point as much West of ε Equulei.
23	Appeared close to δ Herculis, passed midway between α Ophiuchi and α Herculis to a point 5° beyond.
24	Fell vertically about 1° East of ζ Aquilæ ; center of path opposite that star.
25	Directed from α Pegasi, at inclination 45° to vertical.
26	From a point near θ Pegasi, pursued a path parallel to a line joining α and β Aquarii.
27	From a point a little above α Persei.
28	A few degrees left of α Ophiuchi; center of path opposite that star. Path at right angles to line joining α Ophiuchi and α Herculis.
29	Disappeared a few degrees below β Aquilæ.
30	Appeared below clouds, passing from North to South across zenith.* No stars visible.
31	From a point about 2° below δ Ophiuchi, moved nearly horizontally towards Arcturus.
32	Appeared midway between α and β Ursæ Majoris, and fell vertically.
33	From a point just above δ Aurigæ, disappeared almost vertically below Polaris ; path nearly horizontal.
34	Appeared about 10° above θ Ursæ Majoris, and fell vertically towards horizon.
35	Appeared close to ϵ Ursæ Majoris; point of disappearance γ Ursæ Majoris.
36	From a few degrees above α Ophiuchi, disappeared about 3° below α Herculis.
37	Passed about 2° above δ Aurigæ at an inclination 45° to vertical ; the center of path opposite δ Aurigæ.
38	Appeared near γ Persei and disappeared near δ Persei ; path nearly vertical.
39	From a point about 2° right of γ Persei to a point about 1° left of δ Persei ; path nearly vertical.
40	Fell vertically from a point about 3° below and to the left of δ Persei.
41	Appeared midway between α and β Ursæ Majoris, and fell vertically towards the horizon past the latter star.
42	Fell almost vertically from a point a little above ι Cassiopeiæ to a point about 2° left of Capella.
43	Fell vertically from a point midway between Polaris and *f* Custodis.
44	Fell vertically from a point 4° left of η Ursæ Majoris.
45	Appeared about 3° West and below ϵ Ursæ Majoris, disappeared 3° East and above γ Ursæ Majoris.
46	Appeared a few degrees above β Herculis, disappeared close to α Herculis ; path vertical.
47	Fell from a point just below *f* Custodis ; path nearly vertical.
48	Passed midway between η and ζ Ursæ Majoris.
49	From about 5° below θ Draconis, disappeared about 5° above β Boötis ; path vertical.
50	Appeared a few degrees East of γ Aquilæ, disappeared near θ Ophiuchi ; path nearly horizontal.
51	Appeared between α and γ Aquilæ, and fell past the former star towards horizon ; path nearly vertical.
52	From a point about 3° left of Capella to a point about 1° beyond and left of β Aurigæ.
53	Passed about 1° above α and γ Cassiopeiæ.
54	Fell vertically from a point 3° right of *h* Ursæ Majoris.
55	Fell vertically from a point midway between ζ and δ Herculis.
56	From the neighbourhood of ι and κ Cygni to a point midway between α Lyræ and γ Draconis.
57	From near ϵ Lyræ to a point about 4° below δ Lyræ.
58	Appeared near ϵ Lyræ, disappeared about 6° to the right of that star.

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* The observer believed that this Meteor was nearer than the clouds.

OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1866.	Greenwich Mean Solar Time.	Observer.	Apparent Size of Meteor in Star-Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	Number for Reference.
	h m s						°	
July 29	14. 16. 0	H., J.	> 1	Brilliant blue	2	Train	30	1
,,	14. 29. 0	J.	2	Blue	1	None	12	2
,,	14. 31. 45	H.	1	Blue	1	None	20	3
July 30	11. 33. 35	N.	> 1	Bluish-white	1·5	Fine	15	4
August 3	9. 21. 0	W.	1	Bluish-white	0·5	. . .	5	5
,,	11. 18. 40	N.	2	White	2	Faint	. .	6
,,	11. 26. 22	N.	3	Bluish-white	0·5	None	14	7
,,	11. 34. 41	N.	2	Bluish-white	0·5	Faint	7	8
,,	12. 5. 0	N.	1	Bluish-white	1	Train	12	9
,,	12. 13. 5	N.	2	Bluish-white	0·5	None	5	10
,,	13. 5. 0	N.	1	Bluish-white	1·5	Train	20	11
August 4	9. 12. 0	F.	2	Yellowish-white	3	Train	40	12
,,	9. 27. 0	F.	4	Bluish-white	0·7	Short	8	13
,,	9. 30. 0	S.	3	Bluish-white	0·5	None	8	14
,,	11. 13. 30	N.	1	Bluish-white	0·8	Fine	. .	15
August 5	9. 17. 0	W.	2	Yellowish	1	None	7	16
,,	9. 49. 47	W.	3	Bluish-white	1	None	. .	17
,,	9. 50. 22	S.	1	Blue	1	. . .	25	18
,,	9. 53. 0	F.	3	Bluish-white	1	None	6	19
,,	9. 57. 48	S.	3	Bluish-white	0·5	None	6	20
,,	10. 3. 57	W., F., S.	1	Bluish	1	Fine, 1s.	. .	21
,,	10. 6. 57	W.	3	Bluish-white	0·5	None	7	22
,,	10. 15. 7	S.	3	Bluish	0·5	None	6	23
,,	10. 17. 24	W.	3	Bluish-white	0·5	None	6	24
,,	10. 21. 7	S.	2	Bluish-white	0·5	. . .	60	25
,,	10. 21. 32	W.	1	Bluish	1	Fine	15	26
,,	10. 21. 34	W.	1	Bluish-white	1	None	. .	27
,,	10. 35. 12	W., S.	2	Bluish-white	0·5	None	5	28
,,	10. 38. 28	W.	1	Yellowish	1	None	Short	29
,,	10. 41. 57	W., S.	1	Yellowish	1	None	. .	30
,,	10. 47. 47	W.	3	Bluish-white	0·5	None	3	31
,,	10. 48. 9	W.	3	Bluish-white	0·5	None	3	32
,,	10. 53. 34	W., S.	2	Yellowish	0·5	None	8	33
,,	10. 54. 17	W., S.	1	Yellowish	1·5	Fine	. .	34
,,	11. 24. 0	W.	1	Bluish-white	1	None	. .	35
,,	11. 30. 0	T.	= Jupiter.	Bluish-white	2	Fine	9	36
,,	11. 35. 0	T.	3	Bluish-white	0·5	None	11	37
August 7	9. 4. 14	W.	1	Bluish-white	1	None	. .	38
,,	9. 6. 33	S.	3	Bluish-white	0·5	None	30	39
,,	9. 13. 0	H.	3	Blue	1	None	10	40
,,	9. 13. 0	T.	1	Bluish-white	1	Train	7	41
,,	9. 13. 30	H., J.	1	Flame	5	Fine	35	42
,,	9. 15. 45	W.	1	Yellowish	1	Train	10	43
,,	9. 18. 38	W.	4	Bluish-white	0·7	None	6	44
,,	9. 21. 26	W.	3	Bluish-white	0·5	None	. .	45
,,	9. 23. 0	T.	2	Bluish-white	1	Train	12	46
,,	9. 24. 45	W., S.	1	Yellowish	1	Train	. .	47
,,	9. 24. 47	W., S.	2	Bluish-white	0·5	None	. .	48
,,	9. 29. +	T.	2	Bluish-white	0·5	None	7	49
,,	9. 47. 59	W.	3	Bluish-white	0·5	None	. .	50
,,	9. 49. 0	T.	2	Blue	0·5	None	28	51
,,	9. 51. 33	W.	1	Bluish-white	0·4	None	10	52
,,	9. 58. 3	W.	4	Bluish-white	0·5	None	3	53
,,	10. 2. 54	W.	1	Yellowish	1	Fine	6	54
,,	10. 5. 52	W.	2	Bluish-white	1	None	6	55
,,	10. 7. 0	T.	3	Blue	0·5	None	11	56

in the YEAR 1866—*continued.*

Number for Reference.	Path of Meteor through the Stars.
1	From a point just below *f* Custodis to a point 2° right of ι Ursæ Majoris ; path curved.
2	Appeared near δ Herculis, disappeared near β Herculis.
3	Passed from direction of α Lyræ, from a point a few degrees below σ Herculis, midway between ζ Herculis and ζ Cor. Bor.
4	From a point a few degrees left of β Aurigæ, fell at inclination 7° to vertical, towards N. horizon.
5	Seen through a break in the clouds at about the altitude of 30°. Delphinus seen about 15° above and to the right.
6	Directed from α Andromedæ, passed across Honores to *g* Lacertæ.
7	From the direction of ψ Draconis, disappeared midway between γ Cephei and Polaris.
8	Directed from ρ Piscium, passed 8° below γ Pegasi, parallel to line joining α Andromedæ and α Pegasi.
9	From near *n* Lyræ, nearly horizontal ; point of disappearance *o* Herculis.
10	Fell perpendicularly and disappeared near π Cygni.
11	From a point near ζ Herculis.
12	Shot from a point about midway between γ and ϵ Boötis to a point about 24° below ζ Ursæ Majoris.
13	From ϵ Ursæ Majoris, fell towards Arcturus.
14	From a point 2° below η Ursæ Majoris to a point about 2° above ζ Ursæ Majoris.
15	From the direction of γ Draconis to a point near α Herculis.
16	Fell vertically from the direction of ϵ Ursæ Majoris, midway between χ Ursæ Majoris and 12 Canum Venaticorum.
17	From the direction of ζ Cygni, passed between R and *f* Pegasi, at right angles to the line joining those stars.
18	From the direction of γ Ursæ Majoris, about 5° below 12 Canum Venaticorum.
19	Passed about 2° above η Ursæ Majoris, towards Arcturus ; the center of path opposite η Ursæ Majoris.
20	From a point about 3° above ϵ Ursæ Majoris, passed midway between ϵ and ζ Ursæ Majoris.
21	From a point about midway between ζ and ϵ Ursæ Majoris, disappeared near η Boötis.
22	Passed vertically about 5° East of α Ophiuchi ; the center of path opposite α Ophiuchi.
23	From a point near μ Aquilæ, passed midway between δ and 19 Aquilæ.
24	Passed about 6° above L and *p* Camelopardali, from the direction of Cassiopeia.
25	From Polaris, passed between ζ and ϵ Ursæ Majoris to α Coronæ Borealis.
26	From a point about 3° below *u* Capricorni, passed ν Capricorni, parallel to the line joining those stars.
27	Vertically from about 5° above and West of α Pegasi, passed θ Piscium, parallel to the line joining those stars.
28	From a point about 5° above β Ophiuchi, passed at the same distance above σ Ophiuchi.
29	δ Aquilæ opposite center of track ; path vertical.
30	From a point about 3° above δ Sagittæ, passed about 2° above α Sagittæ.
31	Passed χ Pegasi vertically (about 3° East).
32	Passed vertically about 5° East of *q* Pegasi ; the center of path opposite that star.
33	From the direction of δ Aquilæ, passed about 5° above λ Aquilæ and *l* Scuti, parallel to the line joining them.
34	From a point about 7° above β Aquarii, passed α Capricorni towards Jupiter.
35	Horizontally from a point about 3° above β Arietis, passed α Arietis.
36	Appeared 2° below γ Aquilæ, and disappeared 3° left of δ Aquilæ.
37	Appeared midway between α and β Aquilæ, disappeared 3° West of ϵ Delphini.
38	Fell vertically from a point about 10° West of β Lyræ past μ Herculis.
39	From a point 5° below δ Ophiuchi, passed 2° above ζ Ophiuchi towards μ Ophiuchi.
40	From the direction of β Cephei, passed about 2° below ι Cephei towards τ Cassiopeiæ.
41	Appeared 4° above β Cassiopeiæ, and disappeared 3° beyond the same star.
42	From the direction of ϵ Pegasi, passed between ζ and θ Pegasi (a pear-shaped meteor).
43	From the direction of η Ursæ Majoris, passed η Boötis.
44	From a point above α Cygni, disappeared 3° East of that star.
45	From the direction of η Boötis, passed about 10° above and West of 12 Canum Venaticorum.
46	Appeared 3° below *g* Draconis, and disappeared 5° from θ Draconis.
47	Passed λ Draconis towards α Ursæ Majoris ; from the direction of δ Ursæ Minoris.
48	Path almost identical with that of the preceding meteor.
49	Appeared midway between α and θ Draconis, and disappeared 2° below *b* Quadrantis.
50	Described a slight curve about 5° above *n*, *m*, and *p* Scuti.
51	Horizontally from α Draconis to a point 2° above ι Draconis.
52	Passed on the West side of γ Cor. Bor., midway between that star and α Cor. Bor. ; the center of its path opposite γ Coronæ.
53	Passed about 6° above and East of α Aquilæ.
54	Horizontally near S. horizon, immediately below Jupiter.
55	From a point immediately above α Ophiuchi, passed horizontally above α Herculis.
56	Appeared midway between α and γ Coronæ Borealis, and disappeared 2° above β Serpentis.

OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1866.	Greenwich Mean Solar Time.	Observer.	Apparent Size of Meteor in Star-Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	Number for Reference.
	h m s							
August 7	10. 8. 13	W., S.	3	Bluish-white	0·5	None	10	1
,,	10. 9. 13	S.	1	Yellow	1	Fine, 0^s·5	6	2
,,	10. 9. 17	W., S.	1	Yellowish	1	None	6	3
,,	10. 10. 0	T.	3	Blue	0·5	None	8	4
,,	10. 10. 38	W., F.	3	Bluish-white	. . .	None	6	5
,,	10. 11. 49	S.	2	Bluish-white	0·5	None	10	6
,,	10. 13. 55	W.	1	Bluish-white	1	Train	. .	7
,,	10. 17. 37	W.	3	Bluish-white	0·5	None	. .	8
,,	10. 19. 0	N.	2	Bluish-white	0·5	Train	7	9
,,	10. 19. 55	W.	1	Bluish-white	1	None	7	10
,,	10. 22. 30	N.	2	Bluish-white	0·5	Faint	7	11
,,	10. 24. 0	T.	1	Bluish-white	1	Fine	18	12
,,	10. 27. 43	S.	1	Yellowish	1	Fine	17	13
,,	10. 36. 29	H.	2	Blue	1	None	8	14
,,	10. 36. 36	F.	2	Bluish-white	0·5	None	. .	15
,,	10. 50. 47	N.	3	Bluish-white	0·6	None	. .	16
,,	10. 53. 33	H.	3	Bluish-white	1	None	12	17
,,	10. 54. 8	N., F., S.	1	Bluish-white	1	Fine	30	18
,,	10. 54. 11	N.	3	Bluish-white	0·5	None	8	19
,,	10. 54. 28	H., S.	2	Blue	1	None	10	20
,,	10. 54. 30	H.	3	Blue	1	None	10	21
,,	10. 57. 3	N.	1	Blue	1	Fine	20	22
,,	10. 58. 26	H., F., S.	1	Blue	1	Train	12	23
,,	11. 2. 3	H.	2	Blue	1	None	12	24
,,	11. 3. 7	N., H.	3	Bluish-white	1	None	6	25
,,	11. 4. 13	N., H.	3	Blue	1	None	8	26
,,	11. 6. 58	H.	3	Blue	1	None	10	27
,,	11. 8. 18	H., W.	3	Blue	1	None	12	28
,,	11. 9. 15	H.	4	Blue	1	None	8	29
,,	11. 11. 27	N., W.	1	Bluish-white	1·5	Faint	15	30
,,	11. 11. 53	S.	2	Bluish-white	0·5	None	20	31
,,	11. 12. 27	H., S.	1	Bluish-white	2	Train	15	32
,,	11. 15. 11	H.	3	Blue	1	Faint	12	33
,,	11. 16. 13	H.	2	Blue	1	Train, 1^s	16	34
,,	11. 17. 46	H.	3	Blue	0·5	None	10	35
,,	11. 18. 55	H., S.	1	Blue	1	Streak	12	36
,,	11. 19. 47	N.	1	Blue	0·7	Train	10	37
,,	11. 27. 33	N., W.	2	Bluish-white	1	Train	. .	38
,,	11. 27. 34	N., W.	2	Bluish-white	1	Train	. .	39
,,	11. 29. 42	S.	2	Bluish-white	0·5	None	8	40
,,	11. 30. 25	S.	2	Yellow	1	Faint	5	41
,,	11. 30. 56	H.	2	Yellow	1	Train	8	42
,,	11. 31. 59	N.	4	Bluish-white	0·6	. . .	. .	43
,,	11. 32. 2	N., W.	3	Bluish	0·5	None	8	44
,,	11. 34. 12	H., S.	3	Blue	1	Faint	10	45
,,	11. 35. 9	W.	3	Bluish-white	0·5	None	. .	46
,,	11. 35. 53	W.	3	Bluish-white	1	None	. .	47
,,	11. 36. 30	H.	3	Blue	Short	None	15	48
,,	11. 40. 23	W.	3	Bluish-white	0·5	None	6	49
,,	11. 40. 26	H.	4	Blue	1	None	12	50
,,	11. 43. 5	N., H.	4	Blue	1	None	10	51
,,	11. 44. 11	N.	2	. . .	1	Fine	12	52
,,	11. 45. 6	H.	2	Blue	1	Train	20	53
,,	11. 45. 59	H.	3	Blue	1	None	20	54
,,	11. 46. 51	N.	4	Bluish-white	. . .	None	5	55
,,	11. 48. 9	W.	4	Bluish-white	0·5	None	5	56
,,	11. 53. 38	N.	2	Bluish-white	0·8	Train	15	57
,,	11. 55. 22	N.	1	Blue	1	Fine	15	58
,,	11. 56. 21	H.	4	Blue	Short	None	15	59
,,	11. 58. 24	S.	1	Bluish-white	1	Train	25	60
,,	11. 58. 38	H.	3	Blue	1	None	10	61

in the YEAR 1866—*continued.*

Number for Reference.	Path of Meteor through the Stars.
1	From a point 5° West of *l* Scuti, passed about 3° West of *m* Scuti.
2	Passed horizontally 2° below *m* and *o* Canum Venaticorum.
3	From a point about 4° East of γ Delphini, fell vertically past γ Equulei.
4	Appeared near γ Serpentis, and disappeared 4° left of α Serpentis.
5	Fell vertically about 3° West of φ Ursæ Minoris ; center of track opposite that star.
6	From κ Ophiuchi to α Ophiuchi.
7	From the direction of α Lyræ, passed midway between γ and ξ Draconis, and disappeared close to β Draconis.
8	From ζ Cygni, passed about 4° above ι Cygni.
9	From a point 2° below η Pegasi, passed across β Pegasi.
10	Near East horizon, immediately below γ Pegasi. No stars visible near the meteor.
11	From the direction of β Andromedæ, about 5° below γ Pegasi ; the center of track opposite that star.
12	Point of appearance ε Ursæ Majoris ; disappeared midway between 12 and *g* Canum Venaticorum.
13	From γ Boötis to α Coronæ Borealis.
14	Passed from the direction of α Cassiopeiæ between λ and ζ Honorium.
15	From a point 1° below α Ursæ Majoris, disappeared midway between κ and ι Ursæ Majoris.
16	Directed from Delphinus, disappeared near ε Cygni.
17	From a point about 3° above and to the left of λ Draconis towards β Ursæ Majoris.
18	Directed from α Draconis, disappeared at γ Boötis.
19	Directed from γ Cephei, passed across Polaris.
20	From a point 3° left of ι Cassiopeiæ towards F Custodis.
21	From direction of ι Cassiopeiæ, passed just above B and C Camelopardali.
22	Directed from ι Draconis, passed midway between α Coronæ Borealis and γ Boötis.
23	From direction of δ Boötis, passed between ε and δ Coronæ Borealis.
24	From a point 3° left of λ Ophiuchi, disappeared 1° left of ε Ophiuchi.
25	From direction of Polaris, passed across β Ursæ Minoris.
26	From the direction of δ Draconis to a point 3° right of ζ Draconis.
27	From a point between γ and δ Coronæ Borealis.
28	Passed between ξ and ζ Piscium towards θ Piscium.
29	Vertically from a point about 2° right of *r* Custodis.
30	Passed across ι Draconis and between τ and φ Herculis.
31	Passed almost horizontally about 1° above θ Boötis ; the center of path opposite that star.
32	From direction of α Cephei towards *f* Custodis.
33	From the direction of *o* Custodis, disappeared at a point vertically below Polaris.
34	From the direction of π Herculis, passed across α Ophiuchi and 5° beyond that star.
35	From the direction of β Ursæ Majoris, passed about 1° below 12 Can. Venat. ; the center of path opposite that star.
36	From the direction of Polaris, disappeared about 3° below β Ursæ Minoris.
37	From a point 7° or 8° below γ Pegasi, nearly vertical.
38	From a point 1° or 2° above β Herculis to a point about 2° below α Coronæ Borealis.
39	From a point about 6° East of α Coronæ Borealis, fell towards ζ Boötis.
40	Passed between η and θ Draconis, and disappeared 6° or 7° above ι Draconis ; center of path opposite θ Draconis.
41	Appeared near α Ursæ Minoris, and disappeared near ο Camelopardali.
42	Passed horizontally 1° below σ Custodis.
43	From a point near θ Aquilæ towards ε Aquarii.
44	Fell vertically from the direction of θ Serpentis, past η Aquilæ, towards θ Aquilæ ; center of path opposite η Aquilæ.
45	From the direction of α Ursæ Majoris towards a point about 2° below ο Ursæ Majoris.
46	From a point about 3° above α Aquarii, passed 3° above β Aquarii.
47	From a point about 5° below α Pegasi, passed 5° below ξ Pegasi.
48	From the direction of ι Draconis across λ Boötis.
49	From about 3° above ε Piscium, passed midway between that star and δ Piscium, at right angles to the line joining them.
50	Passed from the direction of β Andromedæ across η Persei.
51	From a point 2° above α Andromedæ towards τ Pegasi.
52	Passed from South to North 5° East of *d* Cygni.
53	From the direction of γ Piscium, passed between λ and δ Aquarii.
54	From the direction of γ Pegasi towards θ Piscium.
55	From near ο Cygni, passed midway between γ and δ Cygni.
56	Passed about 3° West of δ Ursæ Minoris ; path vertical, its center opposite the star.
57	Directed from K Herculis, disappeared midway between α Ophiuchi and *s* Tauri Poniatowski.
58	Directed from η Cygni, disappeared 5° East of Delphinus.
59	From a point midway between γ Draconis and α Lyræ, passed between ξ and ο Herculis.
60	From α Ursæ Minoris to ι Draconis.
61	From the direction of β Boötis, passed just above δ Boötis towards α Coronæ Borealis.

OBSERVATIONS OF LUMINOUS METEORS

Month and Day, 1866.		Greenwich Mean Solar Time.	Observer.	Apparent Size of Meteor in Star-Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	Number for Reference.
		h m s							
August	7	12. 1. 13	W.	3	Bluish-white	1	None	12	1
,,		12. 3. 23	N.	1	Bluish-white	1·2	Fine	7	2
,,		12. 3. 45	H.	2	Blue	1	None	10	3
,,		12. 5. 50	N., H.	1	White	1·5	Fine, 1^{s}	18	4
,,		12. 6. 23	H.	3	Blue	1	None	20	5
,,		12. 6. 42	S.	1	Bluish-white	0·5	None	26	6
,,		12. 7. 4	N.	4	Blue	0·5	None	7	7
,,		12. 7. 4	W.	3	Bluish-white	0·5	None	4	8
,,		12. 8. 38	H.	3	Blue	1	None	12	9
,,		12. 12. 43	W., S.	1	Yellowish	1	Fine, 1^{s}	12	10
,,		12. 13. 34	N.	2	Bluish-white	0·8	Small	3	11
,,		12. 16. 30	W.	3	Bluish-white	0·5	None	6	12
,,		12. 20. 42	N., H., W.	2	Bluish-white	0·5	Train	18	13
,,		12. 21. 10	H.	3	Blue	0·5	None	5	14
,,		12. 21. 56	W.	3	Bluish-white	1	None	14	15
,,		12. 23. 43	S.	1	Bluish-white	1	None .	35	16
,,		12. 30. 18	S.	1	Yellow	1	Fine	. .	17
,,		12. 30. 23	N., H., W.	> 1	. . .	1·5	Fine	25	18
,,		12. 32. 25	H.	3	Blue	1	None	15	19
,,		12. 34. 1	W., S.	1	Bluish-white	1	None	6	20
,,		12. 37. 2	N., W.	2	Bluish-white	1	. . .	12	21
,,		12. 37. 4	N., H., W.	3	Blue	1	None	10	22
,,		12. 39. 23	N.	3	Bluish-white	0·7	Train	. .	23
,,		12. 41. 16	H., W.	3	Bluish	1	None	7	24
,,		12. 41. 21	H.	4	White	0·5	None	8	25
,,		12. 42. 16	N., W.	4	Bluish-white	0·4	. . .	. .	26
,,		12. 43. 7	N.	4	. . .	0·3	. . .	. .	27
,,		12. 43. 27	H.	4	Bluish-white	0·5	None	6	28
,,		12. 45. 54	N., W.	2	Bluish-white	0·8	Train	. .	29
,,		12. 46. 6	H., W.	2	Blue	0·5	None	8	30
,,		12. 50. 3	N., W.	3	Bluish-white	. . .	None	5	31
,,		12. 51. 3	S.	> 1	Yellow	1	Yellow, $0^{s}\cdot5$	25	32
,,		12. 51. 6	H.	2	Blue	1	Train	12	33
,,		12. 52. 12	N.	2	Bluish-white	0·8	Train	10	34
,,		12. 55. 13	S.	1	Bright blue	1	Fine	10	35
,,		12. 56. 21	H., W.	2	Bluish-white	3	Train	20	36
,,		12. 57. 4	H.	4	Blue	0·5	None	10	37
,,		12. 57. 35	H.	3	Bluish-white	0·5	Train	5	38
,,		12. 58. 3	S.	2	Yellow	1	Fine	7	39
,,		12. 59. 4	N.	3	. . .	. . .	None	8	40
,,		13. 2. 1	S.	3	Bluish-white	0·5	None	. .	41
,,		13. 2. 21	N.	2	Blue	0·6	Train	10	42
,,		13. 2. 27	W.	3	Bluish-white	0·5	None	6	43
,,		13. 7. 15	W.	1	Blue	1	Fine	12	44
,,		13. 8. 10	H.	2	Blue	1	None	15	45
,,		13. 10. 22	H.	4	Bluish-white	1	None	20	46
,,		13. 11. 47	N.	2	Bluish-white	. . .	Train	12	47
,,		13. 11. 48	W.	3	Bluish-white	0·4	None	6	48
,,		13. 12. 45	H.	2	Blue	> 1	Faint	12	49
,,		13. 13. 40	H.	3	Blue	1	None	6	50
,,		13. 13. 53	H.	2	Bluish-white	1	None	8	51
,,		13. 14. 29	N.	4	. . .	1	. . .	7	52
,,		13. 14. 54	W.	3	Bluish-white	0·5	None	6	53
,,		13. 16. 5	N., W., S.	1	Bluish-white	1·5	Fine	20	54
,,		13. 17. 25	W.	3	Bluish-white	0·5	None	6	55
,,		13. 18. 11	N.	4	Bluish-white	0·5	None	7	56
,,		13. 20. 51	N.	2	Bluish-white	0·7	None	5	57
,,		13. 20. 53	N.	3	Bluish-white	0·5	Train	. .	58
,,		13. 21. 25	H.	3	Bluish-white	1	None	13	59
,,		13. 23. 23	H., S.	1	Blue	1	Fine	8	60
,,		13. 24. 4	N.	2	Bluish-white	0·8	Train	. .	61

in the YEAR 1866—*continued.*

Number for Reference.	Path of Meteor through the Stars.
1	From a point about 5° below and left of ϑ Boötis, passed 5° below γ Boötis.
2	Fell vertically from a point a little below *p* Tauri Poniatowski.
3	From the direction of δ Ursæ Majoris, disappeared perpendicularly below ζ Ursæ Majoris.
4	Directed from τ Herculis, passed 4° above β Herculis towards ι Ophiuchi.
5	From the direction of γ Ursæ Majoris, passed between η Ursæ Majoris and 12 Canum Venaticorum.
6	From a point near α Ursæ Minoris to α Ursæ Majoris.
7	Directed from R Draconis, passed horizontally across α Draconis.
8	Passed about 1° West and above α Draconis; the center of its track opposite that star.
9	From the direction of γ Pegasi, passed between ι and γ Piscium.
10	From the direction of γ Ursæ Majoris towards ε Ursæ Majoris.
11	Moved slowly from a point 2° from α Aquarii (measuring towards γ Aquarii), disappeared 1°·5 beyond that star towards ζ Aquarii.
12	Passed vertically about 3° to the left of β Andromedæ; center of track opposite that star.
13	From near γ Piscium, disappeared near Fomalhaut.
14	Vertically from a point about 8° left of Fomalhaut.
15	From a point about 5° below γ Andromedæ, disappeared just below γ Trianguli.
16	From γ Ursæ Majoris, disappeared between η and θ Draconis.
17	Fell vertically from ε Ursæ Majoris to the horizon.
18	Directed from γ Equulei, passed close to β Capricorni to within 5° of Jupiter.
19	From ι Aquarii, passed across κ and ε Capricorni.
20	From the direction of ε Ursæ Majoris towards 12 Canum Venaticorum.
21	From the direction of μ Cygni, passed β Pegasi; center of path opposite β Pegasi.
22	From direction of π Pegasi across μ Cygni.
23	7° below γ Pegasi, directed from η Andromedæ.
24	Fell vertically from the direction of θ Draconis towards λ Boötis.
25	Vertically from a point about 2° to the right and above ο Ursæ Majoris.
26	Passed 7° East of Delphinus towards θ Aquilæ.
27	Path horizontal; disappeared near δ Capricorni.
28	Horizontally from a point just below α towards π Andromedæ.
29	Directed from γ Pegasi, passed to ω Piscium.
30	Center of track between α and β Aquilæ; path horizontal, South to West.
31	Passed almost horizontally about 3° above ε Aquarii; center of path opposite the star.
32	Horizontally about 5° above α Ursæ Majoris, disappeared near η Ursæ Majoris.
33	From the direction of β Andromedæ, passed ζ and η Andromedæ.
34	From the direction of γ Pegasi to 5° West of α Andromedæ; the center of path opposite the latter star.
35	From γ Draconis to α Lyræ.
36	From the direction of β Arietis, passed across η Piscium.
37	Passed just above φ Andromedæ in the direction of β Andromedæ.
38	From the direction of δ Piscium towards π Piscium.
39	Fell vertically from ζ to ι Draconis.
40	From ω Piscium to a point a few degrees above β Ceti.
41	Appeared near η Draconis; point of disappearance η Ursæ Majoris.
42	Passed midway between α and γ Pegasi, disappeared near ι Piscium.
43	Path inclined 45° to vertical; meteor disappeared about 4° above ι Ceti.
44	From a point about 3° immediately below *e* Delphini, disappeared close to ε Delphini.
45	From the direction of λ Draconis, passed just below δ Ursæ Majoris.
46	From the direction of δ Cygni, passed between α and β Lyræ.
47	From near τ Pegasi, passed midway between β and α Pegasi.
48	Fell from a point about 3° West of *d* Pegasi towards γ Pegasi.
49	From the direction of φ Andromedæ, passed just above β Andromedæ.
50	From λ Ceti towards δ Ceti.
51	From the direction of the Pleiades towards λ Ceti.
52	Directed from τ Pegasi, passed 4° above α Andromedæ; motion slow.
53	Passed a little below *b* and *c* Aquarii towards Fomalhaut; center of track opposite *b* Aquarii.
54	From γ Persei, passed about 5° above β Persei.
55	Passed midway between γ and β Piscium at right angles to their joining lines; center of track opposite β Piscium.
56	Below *b* and μ Persei.
57	From the direction of Cassiopeia, passed midway between β and γ Cephei.
58	Across γ Andromedæ and β Persei.
59	From the direction of *d* to *m* Ursæ Majoris.
60	Passed about 1° below δ Persei, path nearly horizontal; center opposite the star.
61	From α Cygni almost to β Cygni.

OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1866.		Greenwich Mean Solar Time.	Observer.	Apparent Size of Meteor in Star-Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	Number for Reference.
		h m s						°	
August	7	13. 25. 50	H., S.	3	Blue	1	Faint	12	1
,,		13. 25. 56	W.	1	Yellowish	1	Fine	. .	2
,,		13. 26. 42	N., S.	3	Bluish-white	. . .	Train	7	3
,,		13. 28. 24	N.	3	Bluish-white	. . .	None	. .	4
,,		13. 31. 26	N.	3	Blue	2	Faint	13	5
,,		13. 31. 47	W.	3	Bluish-white	0·5	None	4	6
,,		13. 32. 40	H.	1	Yellow	1·5	Fine	10	7
,,		13. 34. 23	S.	1	Yellow	1	None	5	8
,,		13. 34. 31	N.	2	Bluish-white	. . .	Train	5	9
,,		13. 36. 31	N.	2	Bluish-white	1	Train	15	10
,,		13. 37. 24	S.	1	Bluish-white	1	Fine	5	11
,,		13. 39. 53	N.	3	Bluish-white	0·7	Train	. .	12
,,		13. 43. 3	N.,H.,W.,S.	> 1	Bluish-white	2·5	Fine, 2 s.	40	13
,,		13. 45. 3	N.	3	Blue	0·5	None	5	14
,,		13. 45. 53	H.	3	Blue	1	None	10	15
,,		13. 47. 48	S.	1	Blue	1	None	. .	16
,,		13. 48. 13	W.	1	Bluish-white	0·5	None	Short	17
,,		13. 49. 6	H.	2	Blue	1	None	10	18
,,		13. 51. 38	W.	3	Bluish-white	1	None	7	19
,,		13. 52. 37	H.	3	Blue	1	None	12	20
,,		13. 55. 35	H.	3	Blue	1	None	6	21
,,		13. 55. 37	H.	2	Blue	1	None	10	22
,,		13. 57. 25	N	1	Blue	0·9	Fine	. .	23
,,		13. 59. 30	N.	2	. . .	. . .	Train	20	24
,,		13. 59. 30	N.	2	. . .	. . .	Train	20	25
,,		13. 59. 30	N.	1	. . .	. . .	Train	20	26
,,		13. 59. 38	H.	1	Blue	1	None	6	27
,,		14. 2. 15	H.	1	Blue	1	Fine	10	28
,,		14. 2. 18	S.	> 1	Bluish-white	1	Fine	26	29
,,		14. 2. 26	H.	1	Blue	1	Train	15	30
,,		14. 5. 56	W.	3	Bluish-white	0·5	None	7	31
,,		14. 8. 58	W.	3	Bluish-white	1	None	5	32
,,		14. 16. 53	W.	3	Bluish-white	0·5	None	. .	33
,,		14. 18. 56	H.	2	Blue	1	Faint	6	34
,,		14. 21. 59	H.	2	Bright blue	1	Fine	15	35
,,		14. 22. 0	W.	1	Yellowish	. . .	Fine	. .	36
,,		14. 25. 31	W.	2	Blue	1	None	10	37
August	9	9. 13. 0	T.	2	Blue	0·5	None	10	38
,,		9. 31. 0	J.	1	Bluish-white	2	Fine	25	39
,,		9. 39. 50	J.	2	Bluish	0·5	None	7	40
,,		9. 46. 45	J.	2	Bluish	0·5	None	12	41
,,		9. 47. 0	H.	1	Blue	> 1	Fine	20	42
,,		9. 47. 30	H.	1	Blue	1	Fine	12	43
,,		9. 47. 45	H.	2	Blue	1	Fine	10	44
,,		9. 50. 0	T.	1	Blue	1	Fine	8	45
,,		9. 52. 0	T.	1	Bluish-white	1	Fine	8	46
,,		9. 56. 0	T.	1	Bluish-white	1	None	. .	47
,,		10. 0. 22	W.	. . .	Bluish-white	0·5	None	10	48
,,		10. 4. 50	T.	1	Bluish-white	1	Train	10	49
,,		10. 6. 5	W.	3	Bluish-white	0·5	Train	7	50
,,		10. 6. 24	J.	2	Bluish	0·5	None	3	51
,,		10. 11. 15	H.	1	Blue	1	Train	15	52
,,		10. 11. 23	J.	2	Bluish	0·5	None	8	53
,,		10. 12. 15	H.	2	Blue	Short	Train	12	54
,,		10. 12. 18	W., F.	1	Bluish-white	1·5	Bluish	. .	55
,,		10. 16. 25	J.	2	Bluish	2	Slight	20	56
,,		10. 17. 14	T.	1	Bluish-white	1	Train	5	57
,,		10. 18. 45	H.	2	Blue	1	Faint	10	58
,,		10. 20. 15	T.	1	Bluish-white	1	6° long	10	59
,,		10. 20. 17	J.	1	Bluish	2	Fine	18	60

in the YEAR 1866—*continued.*

Number for Reference.	Path of Meteor through the Stars.
1	From the direction of *c* Muscæ, passed 1° above ε Persei.
2	Fell from a point about 10° West of α Aquilæ, past δ Aquilæ, and disappeared near λ Aquilæ.
3	5° below Polaris, moving horizontally W. to E.
4	From a point 5° above γ Pegasi to a point 10° or 12° below α Pegasi.
5	From the direction of β Aquarii, passed slowly 5° below γ Aquarii.
6	Passed about 3° below *c* Aquarii ; the path inclined 45° to vertical ; center opposite the star.
7	From a point just below γ Andromedæ to a point about 2° beyond β Trianguli.
8	Passed between θ and ζ Ceti ; center of path 1° below η Ceti.
9	From the direction of ι Draconis, passed between ε and ζ Ursæ Majoris.
10	From δ Cygni, passed across γ Lyræ.
11	Passed horizontally with center of path 3° above θ Ceti.
12	From a point 5° to the left of Delphinus, passed across θ Aquilæ.
13	From β Andromedæ, passed across γ Cassiopeiæ, and disappeared near γ Cephei.
14	Path inclined 20° to vertical, midway between β and ι Ceti ; fell towards S.E. horizon.
15	Vertically from a point 2° South of *n* Tarandi.
16	From between γ and β Ursæ Minoris, and disappeared between ε and ζ Ursæ Majoris.
17	Passed about 5° above and West of α Ursæ Majoris, with center of path opposite that star.
18	Vertically from a point midway between δ and ζ Herculis.
19	From a point about 4° above *f* Ursæ Majoris, passed about 4° above θ Ursæ Majoris.
20	Vertically from a point 2° West of β Boötis.
21	From the direction of α Lyræ, passed across γ Cygni.
22	From the direction of α Equulei, passing about 2° above β Aquarii.
23	Passed a few degrees below ω Piscium ; path inclined 45° to vertical.
24	From η Andromedæ, passed between β and γ Andromedæ.
25	Passed 4° below α Pegasi ; path inclined 20° from horizontal.
26	Across ι Piscium. These three meteors started simultaneously from Pegasus.
27	From ζ Aquilæ.
28	From the direction of α Lyræ, passed 3° North of ζ Herculis ; center of path opposite ζ Herculis.
29	Fell from α Ursæ Minoris to α Ursæ Majoris.
30	Vertically across ε Herculis, the star in the center of its path.
31	From a point about 8° below and East of λ Ceti, passed about 4° above γ Ceti.
32	From a point about 3° above θ Ceti, passed about 3° above β Ceti.
33	From the direction of Aldebaran towards ν Tauri, disappeared near μ Tauri.
34	Vertically from a point 2° East and below θ Aurigæ.
35	From the direction of τ Cygni, passing just below ζ Cygni, towards Delphinus.
36	From about 2° to right of α Lyræ, passed midway between γ and ξ Draconis, disappearing close to β Draconis.
37	From near ι Draconis towards ι and κ Boötis.
38	Appeared near β Ursæ Majoris, disappeared midway between δ and γ Ursæ Majoris.
39	From about 15° West of ε Ursæ Majoris, disappearing in the direction of Arcturus.
40	Appeared about 10° North of α Cassiopeiæ, disappearing towards γ Andromedæ.
41	Appeared about 10° East of θ Ursæ Majoris, disappearing about 2° West of that star.
42	From the direction of μ Pegasi, passed about 3° above ε Pegasi towards α Equulei.
43	From the direction of λ Pegasi, passed between ε Pegasi and α Aquarii towards β Aquarii.
44	From the direction of β Piscium, passed below γ Aquarii towards σ Piscium.
45	Appeared about 3° above η Boötis, disappeared a few degrees beyond Arcturus.
46	Appeared 5° below Arcturus, disappeared 2° below ζ Boötis.
47	Appeared 2° below ε Pegasi, disappeared near α Aquarii.
48	From the direction of γ Ursæ Minoris, passed γ Cephei towards δ Cassiopeiæ.
49	Appeared 3° to the left of ζ Ursæ Majoris, disappeared 5° beyond η Ursæ Majoris.
50	From a point about 3° above φ Persei, passed ξ Andromedæ.
51	From π Sagittarii, directed towards σ Sagittarii.
52	From the direction of α, passed about 3° below β Aquarii ; center of path opposite that star.
53	From θ Aquarii towards δ Aquarii.
54	Across ε Pegasi ; this star was the center of the track.
55	From a point about 3° below β Ursæ Minoris, passing α Draconis to η Ursæ Majoris.
56	From α Equulei towards α Capricorni.
57	Appeared 2° above λ Boötis, disappeared about 5° below ε Boötis.
58	From λ Aquarii towards θ Capricorni.
59	Appeared 2° below β Ursæ Majoris, disappeared near λ Ursæ Majoris.
60	From α Equulei towards α Capricorni ; same path as the meteor at 10^{h}. 16^{m}. 25^{s}.

OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1866.		Greenwich Mean Solar Time.	Observer.	Apparent Size of Meteor in Star-Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	Number for Reference.
		h m s						°	
August	9	10. 24. 28	F.	2	Bluish-white	0·5	Slight	. .	1
	”	10. 27. 10	W.	4	Bluish-white	1	None	20	2
	”	10. 33. 30	J.	2	Bluish	0·5	Fine	4	3
	”	10. 35. 58	H.	2	Blue	1	Faint	10	4
	”	10. 36. 21	N.	3	Bluish-white	0·4	. .	6	5
	”	10. 37. 14	T.	1	Bluish	1	None	12	6
	”	10. 40. 13	N.	3	Bluish-white	0·7	Slight	8	7
	”	10. 40. 38	F.	2	Bluish-white	0·5	Long	. .	8
	”	10. 44. 8	H.	3	Blue	1	None	10	9
	”	10. 45. 56	J.	2	Bluish	1·5	None	. .	10
	”	10. 49. 17	H.	1	Blue	1	Faint	14	11
	”	10. 50. 28	T.	1	Bluish	1	None	6	12
	”	10. 50. 30	F.	3	Bluish-white	0·5	Slight	. .	13
	”	10. 52. 55	J.	2	Bluish	1·5	Fine	. .	14
	”	10. 54. 26	H.	3	Blue	1	None	15	15
	”	10. 54. 28	T.	1	Bluish-white	1	Fine	7	16
	”	10. 58. 27	T.	1	Blue	1	Fine	19	17
	”	11. 0. 14	H., J.	1	Blue	> 1	Train	12	18
	”	11. 2. 57	J.	2	Bluish	1·5	Fine	. .	19
	”	11. 7. 55	T.	1	Bluish-white	1	None	9	20
	”	11. 8. 30	H.	1	Blue	2	Fine	20	21
	”	11. 9. 45	H.	1	Blue	1	Train	12	22
	”	11. 11. 15	J., T.	2	Bluish	0·5	None	. .	23
	”	11. 11. 42	T.	1	Bluish-white	1	None	16	24
	”	11. 13. 14	T.	1	Bluish-white	1	None	11	25
	”	11. 19. 8	H., J.	2	Blue	1	None	5	26
	”	11. 19. 9	H., J.	2	Blue	1	None	5	27
	”	11. 24. 43	H.	1	Blue	1	Train	8	28
	”	11. 25. 21	J.	1	Bluish	3	Fine	25	29
	”	11. 25. 53	J.	1	Bluish	3	Fine	30	30
	”	11. 27. 45	T.	1	Bluish-white	1	Train	11	31
	”	11. 27. 46	T.	1	Bluish-white	1	None	8	32
	”	11. 30. 35	H.	1	Bright blue	2	Train	6	33
	”	11. 30. 37	H.	2	Blue	1	None	12	34
	”	11. 35. 30	H., J.	1	Bluish	0·5	Fine	10	35
	”	11. 36. 30	H.	1	Blue	1	Train	10	36
	”	11. 37. 0	H.	1	Blue	1	Train	15	37
	”	11. 45. 55	F.	1	Bluish-white	. . .	Train	. .	38
	”	11. 46. 2	H.	> 1	Brilliant blue	2	Fine	25	39
	”	11. 46. 47	T.	1	Bluish-white	1	12° long.	17	40
	”	11. 48. 0	T.	= Jupiter	Blue	1	Train	10	41
	”	11. 51. 5	H.	2	Blue	1	Train	20	42
	”	11. 52. 50	F.	1	Bluish-white	0·5	Train	16	43
	”	11. 53. 45	T.	1	Bluish-white	1	Train	9	44
	”	11. 55. 0	F.	1	Bluish-white	0·5	Train	20	45
	”	11. 57. 39	H.	1	Bright blue	1	Fine	18	46
	”	12. 0. 2	N., W.	3	Bluish-white	. . .	Train	. .	47
	”	12. 1. 40	T.	1	Blue	1	Train	16	48
	”	12. 1. 52	H.	2	Blue	1	Train	10	49
	”	12. 2. 0	F.	1	Bluish-white	1	Train	24	50
	”	12. 5. 0	F.	1	Bluish-white	0·5	Train	. .	51
	”	12. 5. 45	T.	2	Blue	1	Train	10	52
	”	12. 6. 33	H.	2	Blue	1	Train	15	53
	”	12. 8. 37	T.	1	Blue	2	20° long	25	54
	”	12. 12. 5	H.	2	Blue	1	Train	15	55
	”	12. 12. 27	N.	1	Bluish-white	1·3	. .	17	56
	”	12. 13. 20	N.	1	Bluish-white	1	Fine	. .	57
	”	12. 14. 15	H.	2	Blue	1	Faint	10	58
	”	12. 15. 44	T.	1	Blue	1	Train	14	59
	”	12. 17. 43	N., H., W.	1	Blue	1	Train	22	60
	”	12. 18. 35	N., F.	4	Bluish-white	. . .	None	. .	61

in the YEAR 1866—*continued.*

Number for Reference.	Path of Meteor through the Stars.
1	From a point about 4° below β Ursæ Minoris, passing 4° above α Draconis to 12° above η and ζ Ursæ Majoris.
2	From a point about 3° above α Aquarii, passed κ Aquarii towards Jupiter.
3	From α Aquarii towards θ Capricorni; path curved.
4	From the direction of β Piscium, about 3° above λ Aquarii.
5	Directed from γ Persei, passing across γ Trianguli.
6	Appeared 3° below β Ursæ Majoris, disappeared near ψ Ursæ Majoris.
7	Directed from γ Trianguli to α Arietis.
8	Passed 10° to the West and above β Aquilæ.
9	From the direction of θ Persei, passed 2° North of β Persei towards ζ Persei.
10	From α Coronæ Borealis towards ζ Herculis.
11	From the direction of θ Andromedæ, disappearing 3° below τ Pegasi.
12	Appeared near δ Ursæ Minoris, disappeared midway between Polaris and ε Ursæ Minoris.
13	From a point near α Draconis, parallel to a line joining η and ζ Ursæ Majoris above θ Boötis.
14	From α Andromedæ towards τ Pegasi.
15	From the direction of ο Honorium, passed just below π Pegasi to a point about 4° below μ Pegasi.
16	Appeared 3° below δ Ursæ Minoris, disappeared 2° above ε Ursæ Minoris.
17	From α Boötis, disappeared between γ and β Serpentis.
18	From direction of ο Ursæ Majoris, passed between θ and ι Ursæ Majoris. No stars visible at point of disappearance.
19	From θ Aquarii to a point about 10° below δ Capricorni.
20	Appeared midway between β and γ Ursæ Minoris, disappeared about 5° before α Draconis.
21	From the direction of ε Cassiopeiæ, passed close to β Persei towards ξ Persei.
22	From the direction of ε Ursæ Minoris, passed between β and γ Ursæ Minoris.
23	From ζ Ursæ Majoris to a point about 5° below ε Ursæ Majoris.
24	Appeared 3° below Capella, disappeared 3° above γ Aurigæ.
25	Appeared 2° to the left of β Serpentis, disappeared midway between γ and α Coronæ Borealis.
26	Appeared 8° above horizon, passed 5° to the right of the Pleiades.
27	Appeared 8° above horizon, passed 5° to the left of the Pleiades.
28	Vertically from a point 3° East of ε Aurigæ, passed between η and ζ Aurigæ.
29	From α Pegasi towards β Capricorni.
30	From α Aquilæ towards α Lyræ.
31	Appeared midway between α and β Capricorni, disappeared 2° above Jupiter.
32	Appeared midway between β and γ Herculis, disappeared before δ Coronæ Borealis.
33	Passed horizontally East to West across α Equulei; slow motion.
34	From the direction of g Pegasi towards ε Delphini.
35	Appeared about 5° East of γ Pegasi, disappeared 5° West of that star.
36	Passed almost horizontally East to West, just above δ Aquarii; the center of track opposite that star.
37	From the direction of θ Aquarii, passed just above δ and γ Aquarii.
38	Passed about 6° above α Capricorni and 16° above Jupiter, from East to West.
39	From the direction of ρ Aquilæ, passed across α Aquilæ towards λ Aquilæ.
40	Appeared midway between λ and ι Aquilæ, disappeared 2° before ζ Sagittarii.
41	Appeared midway between υ and E. Ursæ Majoris, and disappeared 2° below β Ursæ Majoris.
42	From the direction of ζ Cygni towards α Aquilæ.
43	Passed from a point about 5° below and East of α Ursæ Majoris towards β Ursæ Majoris.
44	Appeared 3° below β Ursæ Majoris, disappeared 2° below λ Ursæ Majoris.
45	Passed 6° above ζ and 2° above η Ursæ Majoris towards horizon.
46	From the direction of ε Cygni, passed close to ε Delphini towards θ Aquilæ.
47	From near ν Piscium to δ Piscium.
48	Appeared 2° to the right of α Ursæ Majoris, and disappeared 2° before ε Ursæ Majoris.
49	Across zenith from South to North from the direction of λ Honorium, disappeared about 3° West of β Cassiopeiæ.
50	Passed between α and β Cassiopeiæ above R Cassiopeiæ.
51	From near Polaris, passed 8° below β Ursæ Minoris; end of path obscured by clouds.
52	Appeared midway between γ and β Herculis, and disappeared 3° below α Herculis.
53	From the direction of β Arietis towards ο Ceti.
54	From the direction of δ Aurigæ to N.N.E. horizon.
55	From the direction of κ Honorium, passed between β and η Pegasi to μ Pegasi.
56	From α to δ Aquarii.
57	Directed from β Andromedæ, passed across δ Piscium.
58	From the direction of ο Honorium across ι Pegasi towards χ Pegasi; the center of track opposite α Andromedæ.
59	Appeared 5° to the left of γ Aquilæ, and disappeared 3° to the left of λ Aquilæ.
60	From 5° North of β Trianguli to a point a few degrees North of δ Arietis.
61	From a point about 5° below β Andromedæ to α Trianguli.

OBSERVATIONS OF LUMINOUS METEORS

Month and Day, 1866.		Greenwich Mean Solar Time.	Observer.	Apparent Size of Meteor in Star-Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	Number for Reference.
		h m s							
August	9	12. 20. 15	J.	1	Bluish	2	Fine	15	1
,,		12. 23. 2	N.	2	Bluish-white	0·6	Fine	. .	2
,,		12. 24. 20	F.	1	Bluish-white	0·5	Train	14	3
,,		12. 26. 55	F.	1	Bluish-white	1	Fine	. .	4
,,		12. 28. 28	W.	3	Bluish-white	0·5	None	10	5
,,		12. 29. 20	J.	1	Bluish	2	Fine	15	6
,,		12. 29. 56	H.	2	Blue	1	Faint	10	7
,,		12. 33. 5	T.	1	Bluish-white	1	None	10	8
,,		12. 33. 32	H.	2	Blue	0·5	None	10	9
,,		12. 33. 36	J.	1	Bluish	1	Fine	4	10
,,		12. 33. 47	N.	2	Bluish-white	0·8	Fine	. .	11
,,		12. 34. 0	T.	2	Blue	1	None	7	12
,,		12. 34. 30	H.	3	Blue	1	Faint	12	13
,,		12. 41. 7	N.	2	Bluish-white	1	Train	. .	14
,,		12. 41. 28	N., H.	3	Blue	1	Faint	20	15
,,		12. 45. 15	H.	2	Blue	1	None	10	16
,,		12. 45. 30	T.	= Jupiter	Blue	1·5	26° long.	38	17
,,		12. 50. 5	H.	2	Blue	1	Train	15	18
,,		13. 2. 43	H., T.	2	Blue	0·5	None	. .	19
,,		13. 10. 0	W.	1	Yellowish	1	Fine	15	20
,,		13. 10. +	W.	3	. . .	0·5	None	6	21
,,		13. 10. +	J.	= Jupiter	Yellowish	3	None	10	22
,,		13. 11. 7	N., H.	2	Bluish-white	. . .	Train	15	23
,,		13. 18. 0	H.	1	Blue	1	Train	20	24
August	10	9. 29. 0	W., S.	1	Bluish-white	1	None	10	25
,,		10. 48. 0	N.	1	Bluish-white	0·8	Train	10	26
,,		10. 48. +	N.	1	Bluish-white	0·7	Train	10	27
,,		11. 19. 12	N.	2	Bluish-white	0·5	. . .	5	28
,,		11. 22. 28	H.	1	Bluish-white	1	Faint	12	29
,,		11. 22. 57	N.	4	. . .	0·5	None	. .	30
,,		11. 24. 22	N.	2	Bluish-white	0·6	Train	12	31
,, ,,		11. 25. 0 12. 0. 0	N. N.	. . .	. . .	. . .	. . .	. .	32
,,		12. 2. 19	N.	3	Bluish	0·5	Train	6	33
,,		12. 4. 48	N.	1	Bluish-white	1·5	Fine	20	34
,,		12. 12. 25	N.	2	Bluish-white	1	Train, 2^{s}·	. .	35
,,		12. 15. 43	N.	1	Bluish-white	1·3	Fine, 3^{s}·	15	36
,,		12. 17. 18	N.	1	Bluish-white	1	Fine, 2^{s}·	15	37
,,		12. 19. 28	N.	3	Bluish-white	0·4	. . .	5	38
,,		12. 19. 53	N.	2	Bluish-white	. . .	. . .	5	39
,,		12. 23. 31	N.	2	Bluish-white	. . .	Train	4	40
,,		12. 24. 43	N.	1	Bluish-white	1	Fine, 2^{s}·	16	41
,,		12. 27. 57	N.	2	Bluish-white	1	Train, 0^{s}·8.	. .	42
,,		12. 35. 48	N.	4	Bluish-white	0·5	None	. .	43
,,		12. 41. 53	N.	3	Bluish-white	0·7	Fine	. .	44
,,		12. 42. 0	N.	. . .	. . .	. . .	. . .	. .	45
,,		13. 15. 54	N.	1	Bluish-white	1·5	Train	15	46
,,		13. 19. 59	N.	3	Bluish-white	1	Train	. .	47
,,		13. 23. 52	N.	2	Bluish-white	1	Train, 1^{s}·5.	12	48
,,		13. 27. 0	N.	. . .	. . .	. . .	. . .	. .	49
August	11	9. 10. 5	H.	1	Bluish-white	1	Faint	15	50
,,		9. 17. 10	H.	1	Blue	1	Faint	12	51
,,		9. 17. 10+	S.	1	Bluish-white	0·5	None	5	52
,,		9. 24. 55	H., S.	1	Bluish-white	1	. . .	10	53
August	14	10. 51. 30	N.	2	Blue	0·7	Train	. .	54
,,		11. 17. 21	N.	3	Bluish-white	0·5	Train	20	55
,,		11. 18. 43	N.	4	Blue	0·5	Faint	2	56
,,		11. 38. 21	N.	3	Blue	0·7	Slight	16	57

in the YEAR 1866—*continued.*

Number for Reference.	Path of Meteor through the Stars.
1	From Polaris towards β Ursæ Majoris.
2	Directed from α Cassiopeiæ across ζ Cygni.
3	From midway between δ and ε Ursæ Majoris towards Arcturus.
4	From ε Cassiopeiæ towards α Ursæ Minoris.
5	From the direction of γ Cassiopeiæ towards δ Ursæ Minoris.
6	Directed from α Cassiopeiæ towards Polaris.
7	From the direction of ι Piscium, passed below γ Pegasi; the center of track opposite γ Pegasi.
8	Appeared 2° to the right of β Pegasi, and disappeared 2° before γ Pegasi.
9	Vertically from a point just below γ Pegasi.
10	From Capella towards η Aurigæ.
11	From near ε Cassiopeiæ, passed midway between β Cassiopeiæ and ι Cephei.
12	Appeared 3° to the right of β Delphini, disappeared near γ Equulei.
13	From the direction of ψ Pegasi, passed midway between γ Pegasi and α Andromedæ.
14	Directed from ε Pegasi, passed midway between β and θ Aquilæ to a point near ι Aquilæ.
15	From the direction of η Pegasi across ξ and ζ Pegasi.
16	From the direction of η Ceti, passed just above β Ceti.
17	Appeared midway between ο and ε Cygni, disappeared 4° to the left of Equuleus.
18	From the direction of ξ Draconis towards ρ Herculis.
19	From a point midway between α and ζ Aquilæ.
20	Passed vertically about 5° East of β Ceti towards horizon.
21	Fell vertically from a point immediately below β Ceti towards horizon.
22	Passed from East to West about 3° below β Ceti; the center of path opposite that star.
23	Passed 5° below β Ceti, path inclined 45° to vertical; the center of path opposite β Ceti. Hazy and cloudy.
24	Vertically from a point about 1° North of α and β Sagittæ.
25	Fell from a point just below γ Cephei towards horizon.
26	Moved rapidly across γ Persei towards γ Andromedæ.
27	Appeared between γ and β Andromedæ, passed across β Trianguii.
28	Passed between λ and α Draconis, directed towards λ Boötis.
29	From a point just above ε Ursæ Majoris towards horizon, inclination 40° to vertical. Disappeared in clouds.
30	Directed from β Cephei, disappeared 5° West of Polaris.
31	Passed across λ Draconis towards *h* Ursæ Majoris.
32	Generally cloudy till 12^{h}, entirely clear afterwards.
33	Passed rapidly between λ and α Draconis towards λ Boötis.
34	Passed midway between α Coronæ Borealis and γ Herculis, directed from θ Draconis.
35	From α Draconis, passed 1° or 2° beyond λ Boötis.
36	From 10° below R Cephei to η Draconis.
37	From near δ Persei, shot 15° towards α Ursæ Majoris.
38	Directed from γ Persei, passed between *c* and *d* Camelopardali.
39	Fell almost vertically past β Aurigæ; the center of path opposite that star.
40	Moved perpendicularly upwards from ζ Cassiopeiæ.
41	From the vicinity of *c* and *d* Camelopardali towards ο Ursæ Majoris.
42	Passed across η Pegasi towards α Equulei.
43	From the direction of γ Persei, passed across β Trianguli. (A flash of lightning in the East.)
44	From a little to the South of β Andromedæ to γ Pegasi.
45	At 12^{h}. 42^{m}. the sky became suddenly cloudy.
46	From the direction of γ Pegasi, passed across κ Piscium.
47	From the direction of *c* and *d* Camelopardali, fell towards North horizon, disappearing at altitude 12°.
48	Directed from γ Persei towards K Camelopardali.
49	Lightning seen in N.E.
50	From the direction of λ Aquilæ, passed between *o* and *m* Scuti towards ο Serpentis.
51	From a point just below ν Aquarii, passed about 5° below α and β Capricorni.
52	Fell vertically between ο and ν Serpentis.
53	From a point 5° below β Capricorni, passed about the same distance below Jupiter towards S.S.W. horizon.
54	From a point between λ and ν Cygni to ζ Cygni.
55	From β Cygni across ζ Aquilæ.
56	From a point between *o* and *f* Cygni, moved towards π Cygni.
57	From the direction of η Pegasi, passed midway between Delphinus and ε Pegasi.

OBSERVATIONS OF LUMINOUS METEORS

Month and Day, 1866.		Greenwich Mean Solar Time.	Observer.	Apparent Size of Meteor in Star-Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	Number for Reference.
		h m s						°	
August	16	9. 30. 0+	J.	2	Bluish	0·5	None	3	1
October	7	8. 47. 0	W.	3	Bluish-white	0·5	None	6	2
October	8	7. 40. 0	W.	1	Yellowish	0·5	Slight	8	3
October	12	7. 58. 0	W.	1	Bluish-white	0·5	None	10	4
October	22	10. 22. 20	N.	> 1	Bluish-white	2	Fine	25	5
October	28	10. 4. 20	N.	= Jupiter	Bluish-white	1	Fine	12	6
October	31	8. 25. 51	W., S.	1	Bluish-white	3	Slight	20	7
„		8. 30. 0	J., W., S.	1	Bluish-white	0·5	None	5	8
„		8. 35. 51	J., W., S.	1	Bluish-white	3	Fine	20	9
„		11. 17. 0	W., S.	1	Bluish-white	2	Fine	. .	10
„		11. 21. 2	W.	1	Bluish-white	1	None	. .	11
„		11. 30. 12	W.	1	Bluish-white	1	Fine	. .	12
„		11. 31. 0	J., W., S.	1	Bluish-white	1	Fine	10	13
„		11. 45. 0	W.	1	Bluish-white	0·5	Fine	. .	14
„		11. 47. 12	W	= Sirius	Bluish-white	2	Fine	30	15
November	3	11. 31. 0	N.	3	Bluish-white	. . .	. . .	. .	16
November	6	5. 57. 0	W.	2	Bluish-white	1	None	15	17
„		8. 56. 0	N.	2	Bluish-white	0·9	Slight	7	18
„		10. 41. 34	N.	3	. . .	1	Train, > $1^{s.}$	25	19
„		11. 2. 50	N.	2	Blue	0·8	None	. .	20
„		11. 5. 40	N.	1	Blue	0·6	Slight	12	21
„		11. 9. 19	N., W.	3	Bluish-white	0·5	None	10	22
„		11. 13. 35	N.	1	Blue	1·5	Train	6	23
„		11. 42. 24	N., W.	1	Bluish-white	1	Fine	12	24
„		11. 55. 32	N., W.	2	Bluish-white	1	Train	6	25
„		11. 58. 30	N.	1	Bluish-white	0·7	Train	. .	26
„		11. 58. 40	N., W.	1	Bluish-white	0·5	Train	6	27
November	8	12. 30. 0	W.	= Sirius	Bluish-white	1	Train	20	28
„		13. 29. 0	J.	2	Bluish	. . .	Slight	7	29
November	9	7. 45. 0	H.	3	Blue	1	None	12	30
„		8. 34. 0	H.	= Jupiter	Brilliant blue	2	Faint	25	31
„		8. 53. 0	H., T., W.	> 1	Blue	3	Train	35	32
„		9. 11. 30	H., T.	2	Blue	1	None	10	33
„		9. 31. 0	H.	1	Bluish-white	> 1	None	20	34
„		14. 35. 41	N.	3	Bluish-white	0·7	Slight	10	35
November	11	9. 57. 0	T.	1	Blue	1	None	7	36
November	13	5. 37. 30	H.	4	Bluish-white	1	None	8	37
„		6. 11. 45	H.	1	Yellowish	6	Fine	45	38
„		7. 30. 0	T.	3	Bluish-white	0·5	None	9	39
„		7. 33. 0	H.	1	Blue	1	None	10	40
„		7. 33. 0	T.	3	Bluish-white	0·5	None	. .	41
„		7. 47. 0	T.	3	Blue	0·3	None	. .	42
„		9. 13. 34	W.	3	Bluish-white	0·5	None	10	43
„		9. 18. 0	F., S., C.	2	Yellow	3	Splendid, $1^{s.}$	110	44
„		9. 19. 31	J.	2	Bluish	Momentary	None	5	45
„		9. 20. 0	T.	2	Bluish-white	0·5	None	. .	46
„		9. 36. 50	H.	2	Bluish-white	1	Train	12	47
„		9. 37. 26	J.	2	Bluish	0·5	None	8	48
„		9. 39. 41	W.	3	Bluish-white	0·5	. . .	5	49

in the YEAR 1866—*continued.*

Number for Reference.	Path of Meteor through the Stars.
1	From γ Ursæ Majoris, directed towards ζ Ursæ Majoris.
2	From a point about 3° immediately below ζ Persei, passed towards δ Persei.
3	From a point just above Capella, moved about 4° above ε Aurigæ ; path slightly curved.
4	Fell vertically from a point about 6° to the right of the Pleiades.
5	From the direction of γ Cygni, 10° below that star, passed slowly across γ Lyræ.
6	Fell from the direction of δ Arietis past ξ Tauri.
7	From the direction of α Draconis, moved slowly towards λ Boötis
8	Fell vertically about 3° East of β Aurigæ; the center of path opposite that star.
9	From the direction of ζ Persei, passed over the Pleiades to ξ Tauri.
10	From a point midway between Rigel and β Eridani, disappeared near γ Eridani.
11	From a point about 3° East of μ Geminorum towards β Canis Minoris.
12	From χ Cygni across Vulpecula, disappeared about 1° above γ Delphini.
13	Passed between λ and μ Ursæ Majoris ; line joining those stars at right angles to track of meteor.
14	Passed a little above β Persei towards γ Andromedæ ; center of path opposite β Persei.
15	From the direction of ο Ursæ Majoris, passed about midway between χ and ψ Ursæ Majoris towards horizon.
16	From the direction of δ Draconis, passed midway between α Cephei and α Cygni, and about 5° above Cygni.
17	From the direction of Polaris, passed midway between γ and δ Ursæ Majoris towards horizon.
18	From ι Tauri, disappeared close to ζ Tauri.
19	From near *c* Camelopardali, passed 6° from ε and δ Cassiopeiæ and parallel to line joining those stars.
20	Directed from α Persei ; appeared near *c* Camelopardali, moved towards Polaris.
21	Directed from P Camelopardali, passed across γ Ursæ Minoris.
22	Fell from the direction of *c* Camelopardali towards ο Ursæ Majoris.
23	Appeared nearly midway between α and φ Orionis ; passed across α Orionis, the star in the center of its path.
24	Directed from β Aurigæ to a point about 2° below ο Ursæ Majoris.
25	From ζ Geminorum to about 5° above β Canis Minoris.
26	Directed from ο Ursæ Majoris, disappeared 2° North of α Geminorum.
27	Center of path 20° below Mars ; directed from α Ursæ Majoris.
28	Directed from a point about midway between α Orionis and γ Geminorum, passed 3° above β Canis Minoris.
29	Appeared near *r* Ursæ Majoris, disappeared about 4° West of α Ursæ Majoris.
30	From the direction of η Aurigæ towards ι Tauri; center of track opposite ι Aurigæ.
31	Vertically from a point below β and γ Draconis.
32	From the direction of γ Piscium, passed below γ Aquarii towards α and β Capricorni.
33	From a point just below γ Herculis, directed towards W. horizon.
34	Vertically from a point about 15° below α Lyræ.
35	From ι Ursæ Majoris, passed across λ and μ Ursæ Majoris.
36	Appeared midway between δ and ε Persei, disappeared 2° below Capella.
37	Passed, with inclination 15° from horizontal, between ε and ζ Herculis, moving from North to South.
38	Moved slowly from the direction of ε Persei, disappearing below Polaris and 5° above and East of α Ursæ Majoris.
39	Appeared midway between O and N Camelopardali, disappeared 2° below β Ursæ Minoris.
40	From the direction of β Aurigæ, commencing about 6° from that star, towards N.E. horizon.
41	Appeared 2° above ι Draconis, disappeared 3° below *l* Quadrantis.
42	Appeared 4° above α Draconis, and disappeared at η Ursæ Majoris.
43	From the direction of γ Cygni, directed towards γ Delphini.
44	Shot from between α and β Ursæ Majoris, across Cassiopeiæ and disappeared near α Aquilæ.
45	From ι Piscium towards θ Piscium.
46	Appeared at β Ursæ Minoris, and disappeared at δ Ursæ Majoris.
47	From direction of ν Orionis, passing just above φ Orionis.
48	From the direction of β Cephei towards δ Draconis.
49	Fell from ε Lyræ past δ Lyræ.

November 9. From $14^{\text{h.}}\ 30^{\text{m.}}$ to $14^{\text{h.}}\ 45^{\text{m.}}$ a watch was maintained for meteors, especially near Leo ; the only one seen was that at $14^{\text{h.}}\ 35^{\text{m.}}\ 41^{\text{s.}}$

OBSERVATIONS OF LUMINOUS METEORS

Month and Day, 1866.	Greenwich Mean Solar Time.	Observer.	Apparent Size of Meteor in Star-Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	Number for Reference.
	h m s						°	
November 13	9. 42. 46	H., C.	1	Blue	1	Train	10	1
,,	9. 44. 23	J.	3	Bluish	0·5	None	8	2
,,	9. 49. 4	H.	2	Bluish-white	1	None	11	3
,,	9. 52. 59	H., W.	2	Bluish-white	2	None	9	4
,,	10. 6. 0	T.	1	Blue	0·5	None	..	5
,,	10. 6. 22	W.	3	Bluish-white	0·5	None	6	6
,,	10. 7. 31	C.	4	Yellow	0·5	Small	..	7
,,	10. 7. 46	S.	1	Bluish-white	0·5	Fine, 0·5.	30	8
,,	10. 9. 51	C.	6	Yellow	0·5	. . .	6	9
,,	10. 10. 23	W.	1	Yellowish	1·5	Fine	8	10
,,	10. 10. 24	F.	1	Yellowish	1·5	Short	8	11
,,	10. 12. 48	C.	5	Yellow	1	. . .	12	12
,,	10. 20. 21	C.	2	Yellow	3	Small	..	13
,,	10. 28. 37	W., C.	2	Bluish-white	3·5	None	80	14
,,	10. 28. 43	W., C.	3	Bluish-white	1	None	10	15
,,	10. 33. 14	C.	3	Bluish-white	1	None	..	16
,,	10. 34. 11	W.	3	Bluish-white	1	None	10	17
,,	10. 43. 23	W.	3	Bluish-white	1	None	12	18
,,	10. 44. 31	S.	1	Bluish-white	3	Fine	40	19
,,	10. 44. 32	H.	2	Bluish-white	1	Faint	15	20
,,	10. 45. 25	T.	1	White	3	Long	48	21
,,	10. 47. 4	N., W.	1	Bluish-white	3	Fine	..	22
,,	10. 48. 6	H.	3	Flame	Short	Faint	6	23
,,	10. 48. 6	J.	2	Bluish	3	Slight	30	24
,,	10. 52. 1	H.	1	Bluish-white	1	Train	12	25
,,	10. 52. 18	H.	1	Blue	1	Train	15	26
,,	10. 54. 7	T.	2	Bluish-white	0·5	None	8	27
,,	10. 56. 45	T.	1	Bluish-white	2	Fine	22	28
,,	10. 57. 20	J.	1	Orange	2	Fine	25	29
,,	11. 0. 13	H.	2	Flame	1	Fine	20	30
,,	11. 1. 15	T.	1	White	2	Fine	40	31
,,	11. 2. 15	T.	1	Bluish-white	1·5	Fine	30	32
,,	11. 2. 42	J.	2	Bluish	1	None	20	33
,,	11. 4. 23	T.	2	Blue	1	None	38	34
,,	11. 6. 48	N., H.	1 increasing.	Blue	5	Fine	50	35
,,	11. 6. 57	W.	1	Bluish-white	2	Green	15	36
,,	11. 7. 43	N., H., J., S.	1	Blue	3	Bright	..	37
,,	11. 7. 52	T.	1	Bluish-white	2	Long	20	38
,,	11. 7. 58	C.	1	White	4	Train	30	39
,,	11. 8. 46	N.	2	Blue	1	Train	..	40
,,	11. 11. 14	H., C.	1	Green	3	Train, 3 s.	15	41
,,	11. 13. 6	T.	1	Bluish-white	2·5	Long	28	42
,,	11. 14. 46	C.	1	. . .	2	Large	40	43
,,	11. 14. 50	N., J.	1	Yellowish	3	Fine	35	44
,,	11. 17. 31	T.	1	Bluish-white	1·5	Long	40	45
,,	11. 19. 20	T.	1	Bluish-white	1·5	Long	12	46
,,	11. 19. 41	N., H.	1	Orange	2	Fine	14	47
,,	11. 20. 48	C.	2	Yellow	2	. . .	..	48
,,	11. 21. 11	C.	1	White	3	Green	20	49
,,	11. 21. 58	N.	= Jupiter	Reddish	2·5	Fine	45	50
,,	11. 23. 32	T.	1	Blue	1	Long	20	51
,,	11. 25. 42	N.	1	. . .	1	Train	..	52
,,	11. 26. 0	H.	1	Orange	3	Bluish	35	53
,,	11. 26. 3	W.	1	Bluish-white	2	Blue	30	54
,,	11. 26. 9	J.	1	Yellowish	1	Fine	7	55
,,	11. 27. 4	H.	2	Blue	2	Fine	20	56
,,	11. 28. 13	H.	> Jupiter	Orange	3	Blue	40	57
,,	11. 28. 22	W., C.	= Sirius	Bluish-white	4	Green	50	58
,,	11. 29. 20	J.	1	Bluish	2	Fine	55	59
,,	11. 30. 0	W.	= Sirius	Bluish-white	4	Green	50	60
,,	11. 31. 6	N.	= Jupiter	Reddish	1	Fine	10	61

in the YEAR 1866—*continued.*

Number for Reference.	Path of Meteor through the Stars.
1	Passed 2° below ε Ceti ; center of track opposite that star.
2	Appeared near δ Tauri, disappeared about 6° West of Aldebaran.
3	From a point just below α Trianguli towards η Piscium.
4	From direction of π Orionis, passed close to ε Orionis ; center of track opposite ε Orionis.
5	Appeared at α Orionis, disappeared at *m* Monocerotis.
6	Fell from the direction of η Draconis past θ Draconis.
7	From β Tauri to Procyon.
8	From the direction of ι Ursæ Majoris, disappeared near β Ursæ Majoris.
9	From α Orionis to π Orionis.
10	From the direction of *h* Ursæ Majoris, past α towards δ Ursæ Majoris.
11	From a point midway between α and γ Ursæ Majoris, passed midway between α and β Ursæ Majoris.
12	From Aldebaran through Orion's Belt.
13	From Castor to β Ceti.
14	From a point about midway between Castor and Pollux ; passed above Aldebaran, and disappeared near ο Piscium.
15	Fell vertically from a point situated midway between γ and δ Ceti.
16	From α Orionis to κ Orionis.
17	From the direction of *h* Ursæ Majoris, passed 3° below λ and κ Draconis ; center of path opposite λ Draconis.
18	From a point 3° above ξ Ceti, passing α Piscium and η Ceti, and disappeared near ι Ceti.
19	Appeared at a point about 1° above the Pleiades, disappeared near β Ceti.
20	From the direction of the Pleiades, passed just above μ Piscium ; the centre of path opposite μ Piscium.
21	Appeared at Pleiades, disappeared about 3° before β Cephei.
22	From a point near ζ Ceti, passed a few degrees below β Ceti.
23	Passed a little to the East and below κ Orionis.
24	Appeared about 5° above Procyon, disappearing in the direction of β Orionis.
25	From the direction of *n* Lyncis, passed about 6° below μ Ursæ Majoris.
26	From the direction of η Ursæ Majoris, passed horizontally towards N.W. No stars visible in track of meteor.
27	Appeared near θ Ursæ Majoris, disappeared at λ Ursæ Majoris.
28	Appeared near α Ursæ Majoris, disappeared near β Cephei.
29	Directed from β Canis Minoris, passing about 7° below β Orionis.
30	From the direction of β Orionis, passed just below γ Eridani towards *m* Eridani.
31	Appeared near Rigel, disappeared near the S.W. horizon.
32	From near γ Ceti to a point near α Orionis.
33	Appeared about 12° below Procyon, passing from East to West.
34	Appeared 3° below γ Ursæ Majoris, disappeared near the N.E. horizon.
35	From the direction of Aldebaran towards β Ceti.
36	From α Ceti, passed across δ Ceti, and 6° below η Ceti.
37	From a point a little below α Orionis, disappeared near ο Eridani.
38	Appeared 2° above δ Draconis, disappeared 3° below θ Draconis.
39	From Mars across zenith to β Ceti.
40	From a point 1° or 2° above δ Ursæ Majoris, passed across α Draconis, disappeared above η Draconis.
41	From the direction of Procyon towards κ Orionis.
42	Appeared near β Ursæ Minoris to a point of disappearance near α Cephei.
43	From Castor to the Pleiades.
44	Appeared about 5° above α Geminorum, passed about 3° above β Tauri, and above the Pleiades.
45	Appeared near η Draconis, disappeared near γ Cygni.
46	Appeared 3° below α Lyræ, disappeared at α Cygni.
47	From about 10° below Procyon towards Sirius.
48	From Mars to horizon at an inclination of 80°.
49	From κ Orionis to horizon.
50	In South, directed from κ Orionis; point of appearance 20° West and below β Orionis.
51	Appeared near χ Ursæ Majoris, to a point near λ Draconis.
52	Started midway between α Tauri and the Pleiades, moved towards the West above α Piscium.
53	Commenced about 5° East of β Tauri, passing that star, and about 3° above the Pleiades towards β Arietis.
54	From a little below γ Draconis to a point about midway between γ and χ Cygni.
55	Appeared near ζ Orionis, disappearing near β Orionis.
56	From direction of Rigel towards *m* Eridani.
57	From direction of Polaris towards β Pegasi.
58	From Castor, passed across β Tauri and across the Pleiades.
59	Appeared near Castor, and disappeared about 3° West of the Pleiades.
60	From Castor, passed across β Tauri and across the Pleiades.
61	In W.S.W., no stars near for reference. Inclination 45°.

OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1866.		Greenwich Mean Solar Time.	Observer.	Apparent Size of Meteor in Star-Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	Number for Reference.
		h m s						°	
November	13	11. 32. 46	N., J.	= Jupiter	Blue	2	Fine	. .	1
	,,	11. 33. 20	J.	2	Bluish	2	None	14	2
	,,	11. 35. 46	T.	1	Bluish-white	1	Fine	29	3
	,,	11. 35. 46	C.	4	Yellow	1	None	10	4
	,,	11. 37. 5	N., H.	1	Flame	2·5	Fine	25	5
	,,	11. 38. 16	N., J.	= Jupiter	Flame	2	Train, $2^{s.}$	25	6
	,,	11. 38. 16	N., J.	= Jupiter	Flame	2	Train, $2^{s.}$	25	7
	,,	11. 38. 26	C.	1	. . .	3	Green	90	8
	,,	11. 39. 3	W.	> 1	Bluish-white	1	Fine	10	9
	,,	11. 39. 31	N., J.	1	Yellow	2	Fine, $2^{s.}$	25	10
	,,	11. 39. 33	T.	1	Bluish-white	1	Fine	12	11
	,,	11. 40. 26	C.	. . .	. . .	1	None	. .	12
	,,	11. 40. 33	H.	1	Flame	2	Fine	20	13
	,,	11. 41. 5	H., J.	> Jupiter	Yellow	3	Fine	20	14
	,,	11. 43. 17	W.	2	Yellowish	1	None	. .	15
	,,	11. 44. 18	H.	1	Blue	1	Train	12	16
	,,	11. 45. 11	N., H., J.	= Jupiter	Blue	3	Grand	. .	17
	,,	11. 47. 57	N., H.	1	Blue	2	Fine	25	18
	,,	11. 48. 48	H., J.	= Jupiter	Yellow	2	Fine	25	19
	,,	11. 49. 46	T.	1	Bluish-white	1	Long	24	20
	,,	11. 50. 4	H., J.	2	Blue	1	Train	13	21
	,,	11. 50. 21	C.	. . .	Yellow	3	Long	40	22
	,,	11. 51. 37	H.	1	Blue	> 1	Train	12	23
	,,	11. 51. 58	N.	1	Blue	> 1	Fine	. .	24
	,,	11. 52. 0	C.	. . .	Bluish-white	. . .	Train	30	25
	,,	11. 53. 7	J.	1	Bluish	1·5	Fine	27	26
	,,	11. 54. 13	H.	2	Flame	1	Train	10	27
	,,	11. 54. 48	N.	= Jupiter increasing	Blue	1	Fine	12	28
	,,	11. 56. 45	H.	1	Blue	2	Train	20	29
	,,	11. 58. 9	C.	2	Bluish-white	2	Train	20	30
	,,	11. 58. 17	H.	1	Flame	1	Train	12	31
	,,	11. 58. 26	H.	= Jupiter	Flame	3	Fine	50	32
	,,	11. 59. 45	W.	> 1	Bluish-white	1	Blue	20	33
	,,	11. 59. 47	N.	> 1	Blue	1	Train, $1^{s.}$	8	34
	,,	11. 59. 47	N.	> 1	Blue	1	Train, $1^{s.}$	8.	35
	,,	12. 0. 41	J.	= Jupiter	Yellow	2	Fine	40	36
	,,	12. 0. 56	C.	1	White	0·5	None	5	37
	,,	12. 1. 46	H.	1	Flame	1	Train	12	38
	,,	12. 1. 56	H.	1	Blue	1	Train	8	39
	,,	12. 4. 11	H.	1	Blue	2	Fine	20	40
	,,	12. 6. 42	N.	= Jupiter	Blue	1	Train	10	41
	,,	12. 7. 3	H.	3	Flame	1	Train	10	42
	,,	12. 10. 16	H.	2	Bluish-white	1	Train	8	43
	,,	12. 13. 32	N.	2	Blue	0·6	. . .	3	44
	,,	12. 14. 58	H.	1	Bluish-white	1	Train	15	45
	,,	12. 18. 0	N., H.	1	Bluish-white	1	Train	14	46
	,,	12. 18. 27	N.	= Jupiter	Blue	2	Fine	30	47
	,,	12. 18. 58	H.	1	Bluish-white	> 1	Train	12	48
	,,	12. 22. 43	H.	> Jupiter	Blue	2	Fine	12	49
	,,	12. 23. 0	H.	1	Blue	1	Train	15	50
	,,	12. 26. 10	N.	> 1	Bluish-white	2	Fine	. .	51
	,,	12. 26. 15	N.	1	Blue	1·5	Fine	. .	52
	,,	12. 26. 44	C.	. . .	White	2	Green	40	53
	,,	12. 27. 8	H.	1	Bluish-white	> 1	Train	12	54
	,,	12. 28. 11	W.	> 1	Yellowish	1	Fine	25	55
	,,	12. 29. 4	C.	1	Bluish-white	3	Train	60	56
	,,	12. 30. 0	H.	= Jupiter	Red	2	Fine	15	57
	,,	12. 30. 40	N.	= Jupiter	Blue	2	Fine	. .	58
	,,	12. 30. 50	W., C.	1	Bluish-white	2	Fine	20	59
	,,	12. 32. 21	N.	> 1	Reddish	1	Fine	. .	60
	,,	12. 33. 20	N.	> 1	Reddish	1	Train	. .	61

in the YEAR 1866—*continued.*

Number for Reference.	Path of Meteor through the Stars.
1	From 5° East of α Orionis, passed across that star to κ Ceti.
2	From ζ Orionis, passing below β Orionis from East to West.
3	Appeared at β Ursæ Minoris, disappeared near β Cephei.
4	Vertically from Aldebaran through Rigel to horizon.
5	From the direction of Aldebaran, passed about 2° below α and δ Ceti towards S.W. horizon.
6	Directed from Leo, passed across β Geminorum towards β Tauri.
7	Directed from Leo, passed across Mars.
8	From horizon to β Tauri.
9	Passed horizontally East to West above β Canis Minoris ; center of track opposite that star.
10	Directed from Leo, passed midway between α and β Geminorum.
11	Appeared near Pollux, disappeared midway between ε and δ Hydræ.
12	From κ Orionis to horizon.
13	From the direction of ε Ursæ Majoris, passed between ζ and η Draconis.
14	From the direction of δ Geminorum towards ζ Orionis.
15	From δ Orionis towards Procyon.
16	Disappeared just below Sirius.
17	Started at σ Ursæ Majoris, passed 7° above Polaris, and disappeared 10° beyond and below Cassiopeia.
18	From the direction of ζ Tauri, passed across ο Tauri, and 5° below Aldebaran.
19	Appeared near ζ Orionis, passing East to West above β Orionis.
20	Appeared near ε Ursæ Majoris, disappeared 6° before E Leonis.
21	Passed just below β Canis Majoris.
22	From Mars through Aldebaran.
23	Directed from Mars, passing about 2° above Procyon ; center of track opposite that star. Cloudy.
24	Fell from 10° below α Cassiopeiæ towards West horizon ; inclined 40° to vertical.
25	From Castor to Orion.
26	Appeared midway between Castor and Pollux, passing towards the Pleiades.
27	From the direction of β Eridani, passed about 2° above γ Eridani ; the center of track opposite that star.
28	Appeared at a point 35° below γ Pegasi ; fell, with slight inclination, from perpendicular, and burst into fragments.
29	Across zenith East to West.*
30	From Aldebaran to Rigel.
31	Vertically from a point about 6° below Aldebaran.
32	Across zenith East to West. No stars visible on account of cloud.
33	Passed horizontally East to West, midway between β and κ Orionis.
34	Directed from Sirius towards West. Inclined 7° from horizontal.
35	Point of appearance vertically below Lepus, moving Westward. Inclined 7° from horizontal.
36	Passed from South to North across the zenith, below the clouds.*
37	From ζ Orionis to κ Orionis.
38	From a point about 5° below Procyon to a point about 3° above and East of Sirius. Cloudy.
39	Disappeared a few degrees below Sirius.
40	Commenced on Aldebaran and proceeded towards α Ceti.
41	From the direction of Leo, across the zenith. Very cloudy, stars not seen.
42	Directed from horizon, disappearing about 3° East of Mars.
43	Passed about 3° above α Leporis ; center of track opposite that star.
44	From 1° West of ε Orionis to 1° West of ζ Orionis.
45	From the direction of α Ursæ Majoris, disappearing midway between β Ursæ Minoris and Polaris.
46	Passed between α Andromedæ and β Pegasi from the direction of Honores.
47	Across Cassiopeia, disappeared close to β Pegasi.
48	Passed vertically 2° North of α Andromedæ ; center of track opposite that star.
49	From a point about 2° East and above λ Ursæ Majoris towards zenith.
50	From the direction of α Ursæ Majoris, passed about 3° above and beyond β Ursæ Minoris.
51	From the direction of δ Ursæ Majoris, passed across α Draconis towards *g* Draconis.
52	From the direction of ε Leonis, passed between η and ζ Draconis.
53	From Castor to Pleiades.
54	From the direction of N.E. horizon, passed across λ Ursæ Majoris towards zenith.
55	From δ Orionis towards δ Eridani.
56	From Mars to Aldebaran.
57	Directed from a point 4° below Procyon towards β Canis Majoris.
58	From *o* Leonis towards ζ Ursæ Majoris.
59	From λ Ursæ Majoris, passed midway between α and β Ursæ Majoris, towards ε Ursæ Minoris ; path curved.
60	From a point 7° above α Lyræ, passed towards West, disappearing close to β Cygni ; path slightly curved.
61	From a point 5° East of α Cygni, passed midway between γ and ε Cygni.

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* The Observers believed that these meteors were nearer than the clouds.

Month and Day, 1866.		Greenwich Mean Solar Time.	Observer.	Apparent Size of Meteor in Star Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	Number for Reference.
		h m s						°	
November	13	12. 33. 26	H.	> 1	Very bright blue	1	Train	25	1
	„	12. 34. 1	W., C.	> 1	Bluish-white	1	Fine	15	2
	„	12. 34. 4	H.	= Jupiter	Blue	2	Fine	12	3
	„	12. 35. 20	H.	1	Blue	1	Fine	18	4
	„	12. 35. 52	N., F.	Very large.	. . .	. . .	. . .	. .	5
	„	12. 36. 17	W., C.	= Sirius	Bluish-white	2	Fine	20	6
	„	12. 37. 14	W.	= Sirius.	Bluish-white	3	Blue	15	7
	„	12. 38. 32	C.	1	Blue	3	. . .	40	8
	„	12. 39. 15	W.	1	Yellowish	0·5	None	6	9
	„	12. 40. 4	H.	1	Green	1	Train	8	10
	„	12. 40. 52	N.	= Jupiter	Yellow	2	Fine	20	11
	„	12. 41. 17	W.	= Mars.	Yellowish	>1	Fine	20	12
	„	12. 41. 17	W.	= Mars.	Yellowish	>1	Fine	30	13
	„	12. 41. 17	W.	= Mars.	Yellowish	>1	Fine	25	14
	„	12. 44. 22	H.	= Jupiter.	Blue	1	Train	14	15
	„	12. 44. 36	C.	1	Blue	3	Green, $4^{s.}$	90	16
	„	12. 45. 50	W.	= Sirius.	Bluish-white	2	Grand	30	17
	„	12. 46. 14	C.	1	. . .	3	Green	40	18
	„	12. 48. 9	N.	>1	Blue	2	Train	.	19
	„	12. 48. 16	C.	1	. . .	3	Green	40	20
	„	12. 48. 19	H.	1	Bluish-white	1	Train	15	21
	„	12. 48. 19	H.	1	Bluish-white	1	Train	12	22
	„	12. 48. 36	W.	= Sirius.	Bluish-white	2	Fine	20	23
	„	12. 48. 40	H.	> Jupiter increasing	Green	3	Train	40	24
	„	12. 50. 1	H.	> Mars.	Reddish	1	Fine	12	25
	„	12. 53. 12	H.	= Jupiter.	Bluish-white	2	Fine	18	26
	„	13. 22. 48	T.	1	Bluish-white	1	Fine, $1^{s.}$	9	27
	„	13. 22. 48	T., C.	1	Blue	3	Train	. .	28
	„	13. 25. 14	C.	1	Blue	2	Train	15	29
	„	13. 26. 41	C.	1	Blue	2	Train	. .	30
	„	13. 28. 42	C.	1	Blue	3	Train, $4^{s.}$	. .	31
	„	13. 30. 46	T.	1	Bluish-white	1·5	Long	. .	32
	„	13. 31. 2	C.	1	Blue	4	Train	. .	33
	„	13. 33. 16	T.	1	Bluish-white	2	Long	6	34
	„	13. 35. 3	N.	= Jupiter.	Yellow	2	Bright	. .	35
	„	13. 36 2	H., C.	1	Blue	3	Train	35	36
	„	13. 40. 28	N.	= Jupiter.	Yellow	1	Fine	. .	37
	„	13. 44. 56	C.	= Sirius.	Blue	6	Train	. .	38
	„	13. 46. 33	N.	= Jupiter.	Yellow	1·5	Train, $2^{s.}$	35	39
	„	13. 46. 54	C.	1	Blue	5	Train	. .	40
	„	13. 49. 44	C.	1	Blue	5	Train	. .	41
	„	13· 50. 51	T.	1	Bluish-white	3	Long, $4^{s.}$	. .	42
	„	13. 52. 5	T.	1	Bluish-white	3	Long	. .	43
	„	13. 53. 14	T.	1	Bluish-white	3	Long	. .	44
	„	13. 53. 30	T.	1	Bluish-white	3	Long	. .	45
	„	13. 53. 54	T.	1	Bluish-white	3	Long	33	46
	„	13. 55. 24	T.	1	Bluish-white	3	Long	33	47
	„	13. 55. 51	T.	1	Bluish-white	3	Long	31	48
	„	13. 57. 50	T.	1	Bluish-white	4	Long	65	49
	„	14. 0. 11	T.	= Sirius.	Bluish-white	6	Green, $3^{s.}5$	. .	50
	„	14. 2. 51	T.	= Jupiter.	Bluish-white	6	Long	. .	51
	„	14. 4. 48	T.	1	Bluish-white	5	Fine	12	52
	„	14. 5. 3	T.	1	Bluish-white	5·5	Fine	. .	53
	„	14. 15. 43	N.	> Jupiter.	Green	1·5	[*]	Nearly stationary.	54
	„	14. 23. 45	N.	1	White	1	Train	6	55
	„	14. 41. 30	H.	> Jupiter.	Bluish-white	2	Train, $10^{s.}$	10	56
	„	16. 9. 29	N.	1	Blue	2	Fine	25	57
	„	16. 10. 48	H.	1	Blue	1	Train	10	58
	„	16. 11. 24	N.	1	Blue	1	Fine	6	59
	„	16. 14. 54	H.	2	Blue	1	Faint	8	60
	„	16. 18. 55	N., H.	1	Blue	1	Fine	. .	61

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[*] The meteor burst into several sparkling fragments, and left a dense vapour, which entirely obscured η Leonis. After the lapse of some seconds (15^{s} or 20^{s}) the star was seen faintly through the vapour, but this appearance was not dissipated until *one minute and a half* had elapsed, the vapour gradually fading away during that time. While dense, the vapour was examined through the spectroscope, but nothing could be elucidated from this examination.

in the YEAR 1866—*continued.*

Number for Reference.	Path of Meteor through the Stars.
1	From the direction of ζ Geminorum, passed midway between α and ϵ Orionis towards S.W. horizon.
2	From a point about 15° below Procyon, shot towards Sirius.
3	From a point about 5° below Procyon towards Sirius.
4	From the direction of μ Ursæ Majoris, disappeared in the center of the four stars α, β, γ, δ Ursæ Majoris.
5	Very bright flash in the N.N.W., behind clouds; like a flash of lightning.
6	From λ Ursæ Majoris, passed midway between α and β Ursæ Majoris towards ϵ Ursæ Minoris.
7	From ξ Geminorum to α Orionis.
8	From Castor to Aldebaran.
9	Passed midway between λ and μ Ursæ Majoris, directed towards β Ursæ Majoris.
10	From direction of E. horizon, passed across n Lyncis towards zenith.
11	From Leo, passed midway between ζ and η Ursæ Majoris.
12	From the direction of a point about 3° below ζ Ursæ Majoris, passed a little above θ Draconis.
13	From the direction of ζ Ursæ Majoris, passed a little below θ Draconis.
14	From the direction of a point about 1° above ζ Ursæ Majoris, passed about 6° below θ Draconis.
15	From the direction of λ Ursæ Majoris, passing about 2° below α Ursæ Majoris.
16	From Capella, through β Aurigæ towards horizon.
17	From Mars, disappeared near α Orionis.
18	From Mars to α Orionis.
19	From Procyon to κ Orionis.
20	From Pollux to α Orionis.
21	Disappeared about 2° above κ Orionis; path inclined upwards.
22	Disappeared about 1° East and 4° below κ Orionis; path inclined upwards.
23	Passed about 10° below Procyon, path horizontal; center of track opposite Procyon.
24	From the direction of α Geminorum, passed between β and α Aurigæ, and disappeared about 4° below α Persei.
25	Passed directly across Mars from the direction of α Leonis.
26	From the direction of β Tauri, passing across the Pleiades.
27	Appeared at α Orionis, disappeared at Rigel.
28	From Rigel to horizon.
29	From Mars to Aldebaran.
30	From Procyon to Sirius.
31	From Mars to ϵ Orionis.
32	Appeared at Procyon, disappeared near α Orionis.
33	From Mars to π Orionis.
34	Appeared at γ Ursæ Majoris, disappeared at ϵ Ursæ Majoris.
35	Across Cassiopeia, from o Ursæ Majoris.
36	From α Ursæ Majoris to α Lyræ.
37	From χ to ϵ Ursæ Majoris.
38	From Mars, through α Orionis to horizon.
39	Fell vertically 1° or 2° on south side of Aries towards West horizon.
40	From Castor to Pleiades.
41	From Mars to Aldebaran.
42	From Sirius to the S.E. horizon.
43	From Sirius to South horizon.
44	From Sirius to South horizon.
45	From Sirius to South horizon.
46	Appeared at Pollux, passed to a point midway between Aldebaran and Pleiades.
47	Appeared at Pollux, disappeared midway between Aldebaran and Pleiades.
48	Appeared at γ Geminorum, disappeared at Sirius.
49	Appeared at α Ursæ Majoris, disappeared at α Lyræ.
50	Appeared at Castor, through the Pleiades to α Cygni.
51	Appeared at Pollux, disappeared at the Pleiades.
52	Appeared at β Ursæ Majoris, disappeared at Polaris.
53	Appeared at β Geminorum, disappeared at Aldebaran.
54	Burst close to η Leonis.
55	Directed from γ Leonis, moved from a point 2° North of α Leonis.
56	From the direction of θ Draconis towards τ Cygni. The meteor burst.
57	Directed from γ Leonis, passed across γ and δ Ursæ Majoris.
58	From the direction of ϵ Arietis towards γ Arietis.
59	Directed from ψ Ursæ Majoris, passed 5° North of β Leonis.
60	From the direction of Aldebaran, passing about 2° South of α Ceti. Center of track opposite α Ceti.
61	From γ Leonis, passed above δ Leonis.

OBSERVATIONS of LUMINOUS METEORS

Month and Day, 1866.	Greenwich Mean Solar Time.	Observer.	Apparent Size of Meteor in Star-Magnitudes.	Colour of Meteor.	Duration of Meteor in Seconds of Time.	Appearance and Duration of Train.	Length of Meteor's Path in Degrees.	Number for Reference.
	h m s							
November 13	16. 19. 15	H.	= Jupiter.	Greenish.	2	Green	30	1
,,	16. 21. 30	N.	3	Blue	0·7	Train	6	2
,,	16. 23. 3	H.	1	Blue	1	None	10	3
,,	16. 23. 58	H.	1	Bluish-white	> 1	Train	20	4
,,	16. 24. 20	N.	1	Blue	1	Train	10	5
,,	16. 24. 30	N.	2	Blue	1	Train	15	6
,,	16. 27. 26	H.	1	Blue	1	Train	12	7
,,	16. 28. 25	N.	1	Blue	1	Fine	20	8
,,	16. 30. 55	N.	1	Blue	1	Fine	15	9
,,	16. 35. 0	N.	1	Blue	1	Train	. .	10
,,	16. 35. 29	H.	1	Blue	1	Train	10	11
,,	16. 37. 46	H.	1	Blue	1	Train	12	12
,,	16. 37. 52	N.	1	Blue	1	Train	. .	13
,,	16. 40. 50	N.	1	Blue	1	Train	. .	14
,,	16. 43. 22	H.	1	Blue	1	Train	10	15
,,	16. 43. 22	H.	1	Blue	1	Train	12	16
,,	16. 46. 36	H.	2	Blue	1	None	8	17
,,	16. 48. 33	H.	1	Blue	1	Train	20	18
,,	16. 50. 20	H.	1	Bluish-white	> 1	Fine	20	19
,,	16. 53. 34	N.	1	Blue	1	Train	15	20
,,	16. 55. 55	N.	1	Blue	1	Train	9	21
,,	16. 59. 0	N.	1	Blue	0·8	Train	9	22
,,	16. 59. 2	N.	1	Blue	0·8	Train	8	23
,,	17. 0. 30	N.	1	Blue	0·7	Train	10	24
,,	17. 1. 59	H.	1	Bluish-white	1	Train	14	25
,,	17. 2. 14	H.	1	Blue	1	Train	12	26
,,	17. 15. 17	H.	1	Blue	1	Train	10	27
,,	17. 16. 24	H.	1	Blue	1	Train	12	28
,,	17. 17. 49	H.	1	Blue	> 1	Fine	20	29
,,	17. 21. 22	H.	1	Blue	1	Train	18	30
,,	17. 25. 46	H.	1	Blue	1	Train	15	31
,,	17. 27. 56	H.	1	Bluish-white	1	Train	12	32
,,	17. 28. 1	H.	1	Bluish-white	> 1	Fine	14	33
,,	17. 29. 0	J.	= Jupiter.	Bluish	3	Fine	21	34
,,	17. 32. 10	H.	1	Bluish-white	1	Train	11	35
,,	17. 36. 0	H., J., C.	> 1	Blue	1·5	Fine	16	36
,,	17. 38. 15	J.	= Jupiter.	Bluish	2·5	Fine	20	37
,,	17. 38. 29	H.	2	Blue	1	Train	15	38
,,	17. 38. 46	N.	2	Blue	1	Train	20	39
,,	17. 42. 17	H.	1	Bluish-white	> 1	Train	18	40
,,	17. 47. 19	H.	1	Blue	1	Train	12	41
,,	17. 49. 44	H.	1	White	1	Fine	15	42
November 28	10. 51. 58	N.	2	Bluish-white	0·5	Train	5	43
November 30	10. 47. 57	N.	1	Bluish-white	1·4	Faint	25	44
,,	11. 7. 42	N.	2	Blue	0·7	None	12	45
December 7	10. 37. 30	N.	2	Bluish-white	0·8	Slight	. .	46
December 12	7. 15. 0	N.	1	Bluish-white	1	Train	. .	47
,,	7. 16. 30	N.	3	White	0·5	None	. .	48
December 13	5. 13. 0	N.	2	White	0·7	Train	7	49
,,	10. 55. 0	N.	2	Bluish-white	1	Train	15	50
,,	10. 58. 0	N.	3	Bluish-white	0·7	Slight	15	51
,,	11. 24. 55	N.	2	Bluish-white	1	Slight	12	52
,,	11. 41. 45	N.	2	Bluish-white	0·8	Slight	10	53
,,	11. 46. 56	N.	3	White	0·6	None	6	54
,,	13. 15. 0	N.	2	Bluish-white	1	Train	18	55
,,	13. 25. 0	N.	2	Bluish-white	0·7	Train	12	56

in the YEAR 1866—*concluded.*

Number for Reference.	Path of Meteor through the Stars.
1	From a point midway between α Cassiopeiæ and γ Andromedæ to a point 4° North of α Andromedæ.
2	From ω to ψ Eridani.
3	Vertically from a point a little to the East of *f* Sextantis.
4	From the direction of β Leonis, passed between δ and γ Virginis.
5	From direction of Procyon, passed midway between Sirius and κ Orionis.
6	From the direction of α Orionis, passed across *m* Monocerotis.
7	Directed from α Hydræ towards δ Canis Majoris.
8	From the direction of δ Leonis to η Boötis.
9	From the direction of γ Leonis, fell perpendicularly from an altitude of 30°.
10	From β to α Cephei.
11	Directed from β Leonis, passing midway between δ and γ Virginis.
12	Directed from γ Leonis towards σ Leonis.
13	From the direction of ζ Leonis, passed between *l* and ο Leonis almost to ε Ursæ Majoris.
14	From the direction of ζ Ursæ Majoris, passed across η Draconis.
15	Directed from γ Leonis, and passed between ν and ξ Ursæ Majoris.
16	Directed from γ Leonis, and passed between ν and ξ Ursæ Majoris.
17	Vertically from a point about 3° North and below Arcturus.
18	From the direction of 12 Canum Venaticorum, passing between γ and δ Boötis.
19	From the direction of ο Ursæ Majoris towards γ Cephei.
20	Directed from λ Geminorum, passed midway between κ and β Orionis.
21	Passed midway between Sirius and γ Canis Majoris towards horizon.
22	Fell from Sirius towards horizon.
23	Directed from γ Leonis, fell from a point 10° left of Sirius towards horizon.
24	Directed from γ Leonis. Point of disappearance γ Canis Majoris.
25	From the direction of 12 Canum Venaticorum, passing between λ and γ Boötis.
26	From the direction of ψ Ursæ Majoris, passing across χ Ursæ Majoris towards ζ Ursæ Majoris.
27	From the direction of α Cephei, disappearing about 4° below β Cassiopeiæ.
28	From α Ursæ Majoris towards λ Ursæ Majoris.
29	Almost vertically from the direction of α Cephei.
30	From the direction of η Ursæ Majoris towards β Draconis.
31	From the direction of ψ Ursæ Majoris towards η Ursæ Majoris.
32	From the direction of ξ Ursæ Majoris towards 12 Canum Venaticorum.
33	From just below ψ Ursæ Majoris, passing 1° below γ and δ Ursæ Majoris ; path parallel to the latter stars.
34	From β Ursæ Minoris, passing near ε Draconis towards horizon ; path vertical.
35	From the direction of θ Draconis towards β Draconis.
36	From a point about 6° below and West of Polaris, disappearing a few degrees East of β Cassiopeiæ.
37	Appeared near γ Ursæ Minoris, passing ζ Draconis vertically towards horizon.
38	From the direction of ψ Ursæ Majoris, passing 1° or 2° North of 12 Canum Venaticorum towards Arcturus.
39	From β Leonis towards Arcturus.
40	Vertically from a point just below η Cephei towards α Cygni.
41	From the direction of β Ursæ Minoris, passing ζ and ψ Draconis.
42	Vertically from a point midway between α Cephei and β Cassiopeiæ.
43	From ν Persei to a point close to β Persei.
44	From direction of the Pleiades, passed across η Piscium and below γ Pegasi, disappearing a short distance beyond that star.
45	From the direction of α Geminorum, disappeared midway between α and γ Orionis.
46	From α Trianguli, disappeared close to γ Pegasi.
47	From the zenith, passed midway between β and γ Andromedæ, across β Trianguli and disappeared in Musca.
48	Across α Persei, disappeared between β and γ Trianguli.
49	Passed across β Trianguli towards β Arietis.
50	From γ Eridani to 19 Eridani, descended with a wavering motion.
51	Passed midway between α Trianguli and α Arietis, and across γ Pegasi.
52	Across α Persei, passed midway between β and ε Persei towards the Pleiades.
53	Directed from ζ Tauri, disappeared near *r* Orionis.
54	Across Capella to *b* Camelopardali ; center of path Capella.
55	From direction of β Andromedæ, passed 7° left of α Andromedæ ; path parallel to line joining α and β Arietis.
56	Passed across γ and *z* Orionis.

NUMBER of METEORS counted during the METEOR SHOWER of 1866, November 13.

1866, November 13. — Hours of Observation.				Number of Meteors counted in each Period.	Number of Meteors in each Hour.	Remarks.
	h m		h m			
From	9. 0	to	9. 10	0	11	Cloudless.
"	9. 10	"	9. 20	3		"
"	9. 20	"	9. 30	1		"
"	9. 30	"	9. 40	3		"
"	9. 40	"	9. 50	3		"
"	9. 50	"	10. 0	1		"
"	10. 0	"	10. 10	5	25	"
"	10. 10	"	10. 20	3		"
"	10. 20	"	10. 30	3		"
"	10. 30	"	10. 40	2		"
"	10. 40	"	10. 50	7		"
"	10. 50	"	11. 0	5		"
"	11. 0	"	11. 10	12	168	"
"	11. 10	"	11. 20	20		"
"	11. 20	"	11. 30	23		"
"	11. 30	"	11. 40	33		"
"	11. 40	"	11. 50	42		Cloudy in the North for five minutes.
"	11. 50	"	12. 0	38		Cloudy in the North.
"	12. 0	"	12. 1	5	2032	"
"	12. 1	"	12. 2	5		"
"	12. 2	"	12. 3	4		Cloudy in all directions.
"	12. 3	"	12. 4	2		"
"	12. 4	"	12. 5	2		"
"	12. 5	"	12. 10	15		Very cloudy.
"	12. 10	"	12. 15	17		"
"	12. 15	"	12. 20	74		Less cloudy.
"	12. 20	"	12. 25	96		Cloudless.
"	12. 25	"	12. 30	151		"
"	12. 30	"	12. 35	182		"
"	12. 35	"	12. 40	293		"
"	12. 40	"	12. 45	348		"
"	12. 45	"	12. 50	231		Cloudy.
"	12. 50	"	12. 55	280		Generally cloudless.
"	12. 55	"	13. 0	327		"
"	13. 0	"	13. 1	37	4858	Clouds here and there.
"	13. 1	"	13. 2	77		"
"	13. 2	"	13. 3	96		"
"	13. 3	"	13. 4	100		"
"	13. 4	"	13. 5	132		Cloudless.
"	13. 5	"	13. 10	591		"
"	13. 10	"	13. 17	605		"
"	13. 17	"	13. 22	539		"
"	13. 22	"	13. 27	611		"
"	13. 27	"	13. 30	313		"
"	13. 30	"	13. 31	76		"
"	13. 31	"	13. 32	84		"
"	13. 32	"	13. 33	96		"
"	13. 33	"	13. 34	111		"
"	13. 34	"	13. 35	101		"
"	13. 35	"	13. 40	399		"
"	13. 40	"	13. 45	307		"
"	13. 45	"	13. 50	171		"
"	13. 50	"	13. 55	264		"
"	13. 55	"	14. 0	148		"
"	14. 0	"	14. 35	No record	Estimated, 995	"
"	14. 35	"	14. 40	64		"
"	14. 40	"	14. 45	83		"
"	14. 45	"	14. 50	61		"
"	14. 50	"	15. 0	No record		"

During the periods marked "No record" no special watch was maintained for counting the meteors. The estimated numbers are formed by applying to these times a numerical frequency inferred from the preceding and succeeding frequencies.

NUMBER of METEORS counted during the METEOR SHOWER of 1866, November 13—*concluded.*

1866, November 13. Hours of Observation.				Number of Meteors counted in each Period.	Number of Meteors in each Hour.	Remarks.
	h m		h m			
From	15. 0	to	15. 35	No record	Estimated, 541	Cloudless.
”	15. 35	”	15. 40	40		”
”	15. 40	”	15. 45	47		”
”	15. 45	”	15. 50	45		”
”	15. 50	”	16. 0	No record		”
”	16. 0	”	16. 45	No record	Estimated, 165	”
”	16. 45	”	17. 0	10		”

During the periods marked “No record” no special watch was maintained for counting the meteors. The estimated numbers are formed by applying to these times a numerical frequency inferred from the preceding and succeeding frequencies.